Wishing you and yours best wishes for the Festive Season. It hasn’t been a normal year and it won’t be a normal Christmas. Enjoy time with your loved ones in person or virtually and most of all, stay safe.

Sincere thanks to our Director of Communications, Professor Vassilios Papalois for putting this issue together and to Ms Cleo Kenington, our Guest Editor.

Here’s to 2021.
And so it ends. Thank you for affording me the enormous privilege of being President of the Association of Surgeons in its Centenary year. Of course, our centenary did not turn into the celebration of 100 years of surgical history, our innovative contemporary surgical practice nor the anticipation of future surgery that we had all hoped. Instead, the more pressing matters of the coronavirus pandemic overtook us and hopefully that will also prove to be but a once in a century event. Celebrations and forward gazing can wait and hopefully, with vaccination in sight, we will be able to face to face meetings we value as a realistic one.

COVID-19 has been devastating but let’s take forward the positives which have arisen from the adversity. The value of our precious NHS to the country and to us all has never been clearer. For many, departmental and team bonds have been strengthened by the pandemic. Communication with colleagues and patients has transformed, as has CPD. The Association worked more closely with other Associations and Colleges in the crisis and that continues. As members, you are the Association and with modern web communication you can now contribute easily and quickly to improving our profession of surgery. The government asks the Colleges, who in turn ask our Association for information relating to general surgery. You have the voice so please get involved!

Perhaps two big challenges stand out for surgery as a result of the pandemic. The first is training with operation case numbers being drastically reduced as a consequence. This raises the prospect of lengthened training at considerable cost or the appointment of consultant surgeons with reduced experience. To mitigate this Gill Tierney, our Vice-President and President Elect for 2023 - 2024 is leading our response to the training crisis with a drive to maximise training opportunities (page 15). Gill is also establishing our new Moynihan Academy for trainees in general surgery and all its disciplines, whose launch we are delighted to announce given the effect of the pandemic on those at all stages of surgical training. The Moynihan Academy aims to support trainees in general surgery including those with a particular interest in EGS. It will offer access to online educational resources, exam revision, training and not least that most important entity as stated by Lord Moynihan 100 years ago, friendship amongst surgeons.

The second huge challenge is how to address waiting lists. For years, we have struggled with the capacity: many units were not keeping up with waiting list demand even pre-pandemic and we know only 75% of the most urgent laparotomies get to theatre in time. Surgeons now operate less than in the past due to inadequate theatre access. We are currently asking the Royal College of Surgeons of England to put forward the case for a very substantial increase in NHS operating theatre capacity in England. We believe that other possible initiatives such as seven day working, evening lists of increased provision in small private centres will struggle to make much of an impact in the often comorbid case mix within general surgery. Theatre nurse staffing is in crisis too, with neither nursing staff nor theatres, we can’t get to first base. Building once area will push trust into training and appointing staff instead of relying on already fatigued staff working longer hours. In some areas it looks like we need an increased capacity of between 20 and 25%. I won’t insult your further views, directly or via your regional representative or both.

I have been a member of the Association for several decades and involved with the Executive Board and Council for 12 years. We have seen a lot of changes in that time, perhaps foremost amongst them is the greater orientation of the Association towards its core clinical activity of emergency general surgery. In our hospital area, it is now much more prominent in the thoughts of surgeons, training bodies and NHS managers. In the last 10 years we’ve revitalised EGS, introduced standards, played an active role in the NEELA Laparotomy Audit, developed emergency general surgery and ambulatory care. Mortality for laparotomy has fallen by 20% nationally, as has length of stay for survivors. The percentage of EGS patients admitted has reduced by around 20-25%. That has been achieved by collaborations and data and research from ASGBI members and I thank wholeheartedly them and the specialists with a particular interest in EGS. It will offer parts: teamwork indeed!

The aim now must be to make EGS sustainable and popular for new generations of surgeons and in line with their work-life expectations. Other countries have managed this, and we can too across our range of 179 acute hospitals. Change is possible.

But change needs engaged people. And there’s no doubt we can do better there. At present, one of the major challenges is popularity and staffing of general and emergency surgery roles in many of our hospitals. Without appropriate and supported manpower, patient outcomes will suffer far more than for lack of the newest drug or modified surgical technique. Staffing is a major threat. What better a message for our 2nd century than to acknowledge and champion the increasing diversity which we embrace in our Association and in general surgery? This year has brought diversity and lack of inclusion to the fore. A glance round our surgical departments shows that our surgical teams are now very diverse in many ways and yet perceptions remain that our profession remains centric: male-centric, London-centric, teaching hospital-centric, surgeon-centric. In fact, our workforce, like our patients, is anything but. Recently ASGBI submitted to the RCS Independent Review into Diversity of Professional Leadership and we also appointed our own Director of Inclusivity, Nuha Yassin, a surgeon with both general and specialist colorectal interests, as a member of our executive board. Perceptions as to historic behaviours play a part and in future ASGBI is going to be working hard to promote and develop Inclusivity in general surgery. The need to support and involve surgeons from all backgrounds is self-evident not only for fairness, equality and respect, but also because we need to help colleagues from all backgrounds function at their best by feeling they are fully part of the team. My team. Your team. Our team. Everyone Matters.

Delivering our Congress, our education days, sharing information and collaborating and coordinating the many aspects of general surgery requires considerable effort and none of that would be possible with the continued support of all of our members. I thank them all and in particular, Bhavnita Patel, our general manager, and her office colleagues Vicki, Jill, Louise and Carol. The management team and executive board have worked particularly hard this year with all the drastic changes necessitated by the pandemic, the need to cancel our Congress and to run multiple free paper sessions and webinars in order to deliver our necessary functions to trainees and members. Christian Macutkiewicz, our Scientific Director, deserves a special mention for leading this. There have been inevitable financial challenges to the Association and our Finance Director, Siong Liu has been a giant in helping us cope with those. We all owe him our thanks and I would ask all members to continue supporting and contributing to our Association at this time. Finally, may I give a personal thanks to the many members, friends and colleagues who have encouraged me, advised me and contributed to these 2 years and to the undoubted vibrancy of ASGBI – thank you all.

I pass on the baton to incoming President Neil Welch and wish him and you well for 2021. Neil is closely supported by his executive board and council, both of which are loaded with young, diverse and extremely talented surgeons. They are developing new initiatives and committees to advance various issues of concern. Please support them and if you’d like to be more involved, just let us know. The next 100 years will bring at least as many changes as the last but together in our Association we can all play the part that we wish in improving surgery for patients and surgeons.

A friendly and supportive Association, where Everyone Matters.

Best Wishes

Professor Iain Anderson
President, ASGBI
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A Letter from the Editor
Professor Vassilios Papalois, ASGBI Director of Communications

Dear Colleagues, Dear Friends,

To say that 2020 was an extraordinary year would certainly be a major understatement! COVID 19 affected and changed our lives and our work in a way that at the beginning of the year would be unimaginable. We all had to adapt, adjust and evolve and the ASGBI did so with great success as it is highlighted in the letter of our President, Professor Iain Anderson, and as I believe is reflected in the articles of the current issue of ASGBI SURGICAL LIFE.

We are delighted that Ms Cleo Kennington is our Guest Editor for this issue. We have been privileged over the last three years to have real distinguished Guest Editors tackling massive issues related to modern surgical practice. Ms Kennington carries on this tradition with great distinction in collaboration with a group of top class experts in the field of surgical sustainability. I found the articles they have put together most refreshing and thought provoking and I believe that they allow us to think in a completely new dimension when it comes to day to day surgical practice and our vocation overall. I am sure that you will enjoy reading them and they will certainly generate a lot of discussion. Ms Kennington and her team have my most grateful thanks.

The section of the Guest Editor is complemented with a series of articles related to the effect of COVID 19 in surgical practice and training, surgical safety, medico-legal challenges, surgical research, the evolution of our Women in Surgery project, the use of social media to set up a journal club and great feedback from CORESS. Furthermore, the popular sections of Proudly Presenting our Team and Art and Surgery are also represented with some very strong entries.

The next issue of SURGICAL LIFE will be published in spring of 2021 just before our virtual ASGBI Congress. This will be followed with a post-Congress summer issue and our winter issue with an overview of the year. The spring issue of 2021 will be a prelude to our Congress with an extended Guest Editor Section focusing on Future Surgery. We are getting more and more material for every new issue and you are kindly invited to contribute your thoughts for the content and format of SURGICAL LIFE and submit your articles.

In this issue, we can also very happily announce the launch of our new e-journal ASGBI SURGERY! You will find all the details about the new journal in the current issue and on the ASGBI website. The idea for launching the new journal came after consultation with our members who supported the concept of a journal that will facilitate the submission of short papers on surgical advancements, innovations, audits, research (and more!) following a robust but expeditious review, editing and publication process- all in two weeks! I am most grateful to the distinguished Colleagues who have joined the first Editorial Board and have contributed their experience and expertise in support of the new journal. We are also delighted that although the new journal is literally a “new-born”, we already had the first submission which has gone through peer-review and editing and will be published soon. The new journal has attracted a lot of attention in social media and we hope that this will translate into submission of articles. It is another vehicle in support of our professional life offered by the ASGBI and will require the support of all our members so that it can flourish and serve us well.

Another innovation that we have introduced over the last few months is the role of the ASGBI Social Media Editor. This is a task that is taken on for two months by ASGBI members with a skill in handling social media aiming to promote the ASGBI causes, facilitate networking and promote dialogue. Social Media Editors also put their own personal touch when it comes to generating interest and discussion on topics related to surgical life which are dear to their heart. Ms Cleo Kennington, Mr Jonathan Epstein and Mr Kamal Mahawar have been our first three Colleagues who took on this role and they have done a truly fantastic job getting the number of our followers to over 11,500 and generating really constructive social media traffic! Ms Irene Bellini will be our first Social Media Editor for 2021 and I am sure...
sure that she will continue and advance the great work of her predecessors. As is the case with all our other projects, you are strongly encouraged to put your name forward and have this leading role for the ASGBI social media portfolio.

Furthermore, we continue with the Presidents’ e-zine complemented now with a punchy weekly e-mail and the development of our e-educational platform with new modules, videos and webinars.

Last autumn, the ASGBI conducted a survey among its members aiming to capture the effect of COVID 19 on the life and practice of surgeons. Thanks to the input of our members, we had some very interesting quantitative and qualitative data which are in the process of publication. The whole project took no more than two months to complete and it is a model that we wish to use in the future for producing credible, evidence-based publications.

We are also delighted that the Emergency General Surgery, Surgical Sustainability and Women in Surgery groups continue their productive work via social medial and beyond; it is a concept that we wish to promote further and your ideas are most welcome.

Our ASGBI Medical Student Apprenticeships programme also had a very successful start with two medical students working actively and productively with our team. A campaign is under way to make the apprenticeship popular and generate much more interest for the ASGBI within the medical schools.

The end of this centenary year for our historic Association marks also a change of guard in the ASGBI leadership. I am sure that you will all join me in expressing our sincere respect and most grateful thanks to Professor Iain Anderson for his most successful term in office and his massive contribution to the ASGBI over many years as well as in offering our warmest congratulations and great support to Mr Neil Welch for taking over as our President and Ms Gillian Tierney for her election as our Vice President.

I would also like to express my sincere gratitude to Ms Vicki Grant for her really superb work for this issue as well as for the whole communications portfolio of the ASGBI. Her professionalism and efficiency are exemplary.

I sincerely hope that the winter issue of SURGICAL LIFE will be a good companion during the upcoming holidays. Our warmest wishes to you and your loved ones for Healthy, Peaceful and Happy Christmas and a Blessed (and eventually COVID 19 free!) 2021!
The ASGBI Executive has agreed to proceed with the establishment of a new clinically oriented e-journal for the Association based on a proposal by Professor Vassilios Papalois, ASGBI Director of Communications and Informatics. This will be in addition to the existing successful e-journal of the ASGBI that addresses mainly current professional matters.

Short articles could address:
- Clinical Cases
- Audit Analysis
- Small Research Studies
- Clinical Innovations
- New Techniques
- Smaller Sites Studies

There will be a robust, quick and efficient review process within 14 days.

Articles would be published on the Journal page on the ASGBI web site following the completion of the reviewing process. Articles will be cross referenced with the e-learning platform and will also be publicised via the ASGBI Social Media channels.

The members of the first Editorial Board are:
Editor: Vassilios Papalois
Members:
- Anita Balakrishnan
- Irene Bellini
- Evangeline Ethimiou
- Kim Gorissen
- Chris Lewis
- Siong Liau
- Kamal Mahawar
- Giovanni Tebala

Authors should submit short papers/letters to the editor that will enrich the existing literature by conveying:
- Clinical cases
- Unusual or underreported clinical presentations
- A novel or innovative diagnostic or treatment approach and its outcomes
- New surgical techniques or modifications of current techniques
- Cases highlighting a need for change in current practice
- Cases which are of educational value
- Audit analysis
- Small research studies
- Letters to the Editor

Authors must consider the following when preparing manuscripts for submission:

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*Combined total of tables, figures and photograph

As case reports are published online, there are no printing charges for submission.

Language: All work must be submitted in English and written in a formal and academic style. Authors should aim to convey information clearly and concisely.
General Formatting:

- Manuscripts should be double spaced and typeface font should be 12-point. Arial and similar sans serif fonts are preferred.
- Page margins must be 2.5cm (1-inch) from the top/bottom and left/right.
- Image files must be uploaded in .tiff, .eps or high-resolution PDF format.
- Abbreviations should be avoided in the manuscript title and within the Abstract. The full term or short phrase for which an abbreviation stands must be delineated prior to its use in the text. Exceptions to this are standard units of measurement e.g. cm, mmHg etc.

MANUSCRIPT PREPARATION

Manuscripts must be structured under the following headings:

i. Title Page
ii. Summary Page
iii. Text Pages
iv. References
v. Tables
vi. Figures/ Photographs

TITLE PAGE

The Title Page must include:

- Manuscript full title
- Authorship statement (Complete list of authors, using their full names, name of institution and department in which the work was completed and author affiliations, details of corresponding author (full name, workplace address, telephone no. and e-mail address). The specific contribution of each author must be indicated. Further guidance can be found in the ICMJE Recommendations page http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html.
- Funding, financial support, grants (including a quote of the sum(s))
- Consent and Ethics Approvals (if applicable)

SUMMARY PAGE

The Summary Page should include:

- Abstract
  - Word Limit (max. 100 words)
  - Structured, with the following headings; Background (the context, purpose and significance of the publication), Case Report (the principal, relevant clinical details), Conclusion. Abstracts must not include any references.
- MeSH terms/ Keywords: 3-10 words or short phrases, appearing after the Abstract.

REFERENCES

Authors should select references that are up-to-date and accessible. Unpublished work cannot be cited.

The ASGBI uses AMA (American Medical Association) referencing format.

For example:

Doe J, Williams G, Jones H et al. Article Title. Journal Name 2016; 100.1198-1210

- References in the main text body must appear as superscripts
- References must be listed in the order in which they appear in the text
- A maximum number of 6 authors can be listed in a citation. If there are more than 6, the first 3 should be listed, followed by et al.
- The article title must be listed after the authors’ names. This is followed by the name of the journal (this can be abbreviated, as accepted by the National Institute of Medicine).

Any references included in tables or figures should follow consecutively from the references embedded in the text.
Update from the Vice President
Mr Neil Welch, Vice President, ASGBI

As you are all aware, COVID-19 meant we had to postpone the 2020 Congress and therefore the planned AGM. Instead, this was held by Zoom and a big thank you to everyone who joined the Zoom AGM on the 7th July. Interestingly we had more attendees at this Zoom AGM than we often get at the face to face AGM when it is held at Congress. The full papers are available to all members by following the links sent to your email address prior to the meeting (www.asgbi.org/meetings/agm Password: 1920@Apple*Tree).

I would like to take this opportunity of describing some of the highlights for those who could not attend.

We were saddened to hear of the deaths of 3 of our members, and observed a minutes silence in acknowledgement of their service and lives.

We have updated our Memorandum and Articles of Association to reflect the present state of the Association and to allow for some changes going forward. In particular we have changed the term used for our retired members from “Senior Member” to “Emeritus Member” and plan to use the term “Senior Member” as a progression from “Fellow” if they fulfil the expectations as laid down by the Board in positive acknowledgement of their commitment to General Surgery and the Association. To become a Senior Fellow the Board have proposed that it will be necessary to have been on the GMC Specialist Register for a minimum of 5 years, be a Fellow of ASGBI for at least 5 years, and to attend 3 days of ASGBI meetings every 3 years (including Congress & EGS meetings whether face to face or virtual). We have also increased the potential number of directors to allow for future developments and inclusivity.

We were delighted to be able to welcome so many newly appointed Regional Representatives to ASGBI Council, and thanked Mr V Trompetas who finished his period of service as a Regional Rep. The Regional Reps have worked together to meet by Zoom on a monthly basis and it has been fascinating to hear what is happening in different parts of the country especially during the pandemic.

Dr David Murray has been awarded an Honorary Fellowship of ASGBI and I’m sure you will all welcome him. He has done sterling work as Chairman of the National Emergency Laparotomy Audit, and a supporter of the Association.

Financially the Association was on the path to recovery when COVID-19 struck. The postponement of our centenary Congress in June in Glasgow has some significant financial risks with a potential impact in 2021, and your Board has worked hard to understand and mitigate these risks. We are very grateful to all our strategic & industry partners for their support, and for members who had registered for the 2020 Congress and agreed to defer this registration until the 2021 Congress. Reports from the Executive Members of the Board were also tabled. There are some exciting new developments expected this year including the establishment of a trainee group “The Moynihan Academy”, a new clinically orientated open access e-journal, ASGBI Surgery, a social media editor (Cleo Kenington, Jonny Epstein and Kamal Mahawar were our first three – well done to all), and Medical Student Apprenticeships.

Many of you will have seen or been involved in the programme of ASGBI Educational Webinars, and Covid:Harem research. We have also been running Zoom presentations of the short papers and abstracts that would have otherwise been presented at the 2020 Congress to allow people a chance to present and get the abstract published. These have been well received.

COVID19 has resulted in a huge amount of change and hard work. Many of the changes will become embedded going forward. We are enormously grateful for the support and drive shown by so many members in support of the Association.
Due to the continued uncertainty caused by COVID-19 we have taken the decision to hold our 2021 Congress Virtually from 4th – 8th May 2021.

We are planning an exciting programme with a range of session formats to educate and engage.

Abstract submission is now open and the deadline to submit is 31st January 2021. All accepted abstracts will be published by the BJS.

There is a fantastic line up of national and international speakers and we will be calling on their experience in cancer care, technical innovations, robotics and latest guidelines in surgical care. We will look at the impact of COVID19 on our practice and what we can learn from it to improve. We’ll also focus on how we can work more sustainably.

We’ll be announcing further details of the programme in January.

We hope to see you virtually in May!

CALL FOR ABSTRACTS
DEADLINE: SUNDAY 31ST JANUARY 2021

The first UK major surgical conference of the year

All accepted abstracts will be published in the BJS

Let’s meet virtually, exchange ideas, share research and grow together at the largest UK surgical conference with ASGBI, the largest UK surgical society.

Online submission at www.asgbi.org.uk

Prizes include:
Moynihan Prize  NELA Prize  Audio Visual Prize  Short Papers of Distinction

There will be no additional charge for submitting an ePoster in 2021.
The effect of Covid-19 on training in the UK

Chris J Lewis
Consultant General and Emergency Surgeon. Oxford University Hospitals NHSFT. 
Email: Chris.J.Lewis@ouh.nhs.uk

With the second national lockdown in progress and the significant disruption to the NHS caused by Covid-19 the education and training committee of the ASGBI met to discuss the ramifications of the disruption to surgical training. During the first wave of Covid-19 a large number of NHS Trusts came under tremendous pressure, causing reallocation of staff to cover staff shortages and address acute deficiencies in care. Only six months later and we have to quantify what this disruption has meant to surgical training.

It is evident that surgical training suffered as a result of Covid-19. Data collated from regional training programs has highlighted a stark reduction in the number of operating cases undertaken by trainees. A 50% reduction in numbers is seen in many areas of the country when compared to the same period the year before. Of note is the regional variation which reflects different areas of the country being affected to a greater or lesser extent by Covid-19. This also reflects the autonomy given to Trusts in how to manage the crisis meaning staff reallocation again shows marked variation.

The most recent ARCP figures suggest that trainees have been able to potentially extend their training by utilising the Covid-19 related outcomes, but the numbers are significantly less than one would expect given the training logbook figures. Extending training brings its own issues. Outcome 10.1 recognises that the trainee has been making progress in their training but there has been delay in the acquisition of competencies/capabilities due to COVID-19. As the trainee is at a critical progression point, it either would not be safe or not possible for the trainee to progress in, or complete, their training programme. Additional training time is therefore required. Funding from HEE needs to be reallocated and training posts given at the expense of new appointments. This, in effect, could disadvantage the new cohort of trainees coming through the system.

There is reassurance that National Selection will not be affected by the Covid-19 pandemic and its after effects. Indeed, both MRCS and FRCS examinations are taking place with increased capacity, meaning those candidates who were delayed in sitting their examinations due to cancellations earlier in the year, have been inconvenienced as little as possible. Examinations have changed to accommodate social distancing regulations and the most recent feedback suggests that this has been a success while continuing to maintain quality and fairness.

The concern now relates to how we can reboot the system for surgical training. The environment is significantly different than the pre-Covid era with the increased utilisation of “Virtual” medicine. The use of online teaching with webinars has exponentially increased since March 2020, along with the evolution of virtual conferences and meetings.

The feedback from these has generally been positive and the convenience of attending on-line means that it is likely that virtual learning is here to stay and will no doubt continue to evolve.

With social distancing regulations face to face and small group teaching, especially when it comes to practical surgical skills, have been adversely affected. The nature of cadaveric workshops means that high costs may prohibit these in the short term. The ATLS course does rely on face to face interaction and this is becoming a problem as places on courses are reduced, making obtaining the mandatory qualification increasingly difficult.

Significant anecdotal evidence from trainees suggests that although many hospitals are returning to semi-normal elective practice, the changing face of how we treat patients is reducing opportunity. In many hospitals, outpatient clinics are being held virtually, often without trainee involvement. This opportunity for training should be utilised as it should be no different to the previous situation with extra patients allocated to the trainee. More training opportunities also appear to be lost with endoscopy. Figures suggest that the current situation means that trainees are likely to lose the equivalent of a year of training experience in endoscopy due to the new regulations. Although lists are being reduced and PPE levels raised, this should not be a barrier for surgical trainees to undertake endoscopy. In fact, we recommend that priority is given to those trainees who have been adversely affected and endoscopy time proactively allocated as part of the trainee’s rota.

Operating opportunities should also be made a priority given the marked reduction in cases over the past six months. Where at all possible the trainee should be given access to both emergency and elective lists with training being the prime objective. This has been hampered by some operating lists becoming dual consultant or moved to the private sector. Again, this should not be a barrier and trainees must be given the opportunity to attend these lists as part of their training.

Pressures on trainees are also greater with the effect of the Covid-19 pandemic. Facilities and capacity are added stressors along with increased waiting lists and disruption of normal practice due to the implementation of Covid free sites. This has undoubtedly affected the resilience of trainees and has been highlighted in a survey by the ASGBI. An extensive survey of over 800 ASiT members has also highlighted quantitatively the overall effects of Covid-19 on training, which are of concern.

In summary the effects of the Covid-19 pandemic have proven to be substantial and detrimental to surgical training. Although areas such as examinations and national selection appear to be catching up, there are still many opportunities for training being lost that could be utilised and minimise the damage created and this is a result of the ongoing crisis. The three things that matter in the development of our world class surgeons are training, trainees and trainers. We should continue to devote as much effort into minimising the impact of Covid-19 to maintain this excellent standard for the future by concentrating on these.

With these issues in mind we asked a selection of trainees at various levels of experience, seniority and ethnic background to give a short narrative of their experiences with training during the pandemic.

Rosheen Ali is a CT Grade trainee based in the south of England. Her experiences are representative of many peers who have been continuing to seek training opportunities throughout the Covid-19 pandemic. She writes:

“The Covid-19 pandemic had and continues to have quantifiable and unquantifiable effects on surgical training. The primary quantifiable impact the pandemic had on my training was an absolute reduction in exposure in theatre. Between March and May 2020 I was only involved in 14 operations in comparison to 40 cases in the period beforehand. My involvement in them was reduced to assisting and closing skin whereas previously I had been performing or part-performing the same operations. I feel there were several contributing factors to this: the drive for all emergency operations to be consultant led, the cancellation of elective lists which provide essential teaching and training, and a shift in the rota towards service provision.

The unquantifiable impact became more apparent once lockdown was lifted and my working environment returned to a semblance of normality. I felt less confident in theatre and working environment returned to a semblance of normality. I felt less confident in theatre and struggled with skills that I previously had felt comfortable with. Discrepancies between the FY1 and SHO rotas meant that there was less junior support on-call whilst dealing with the same volume of referrals as before.”
I felt I was fire-fighting to deliver safe care instead of learning and appreciating the complexities of each case. I think these new difficulties in the workplace as well as lockdown measures have had a profound impact on the departmental morale. I felt I had less reserve, resilience and motivation to engage with the training that was available, a sentiment that was echoed by many of my colleagues. Whilst this has improved following August changeover, especially around the COVID 19 restrictions, the limited team-bonding throughout the surgical hierarchy and restoration of camaraderie which are essential for a cohesive team and a comfortable training environment for all grades.

Mohammed Shams is a senior clinical fellow also based in the south of England. He is originally from Egypt and moved regions to improve his training exposure and seek new experiences. He writes:

“It has been such an eventful year that I sometimes feel it has been lasting forever. Covid-19 has changed the world we live in. It has negatively affected training, especially during the first wave. All elective surgery stopped in our Trust except for emergency surgery. All clinics suddenly were run via the telemed system and all meetings with the team have become online. This meant missing learning and training opportunities in clinic, endoscopy and theatres, but also learning new skills and ways of adaptation.

I found myself being told that I was about to be probably "redeployed" to ITU. I was not part of that decision and felt particularly stressed at the time; a combination of fear of the unknown and feeling uncertain in being able to help others or oneself. I felt vulnerable although I wanted to help. I was independent and had no help. I started learning some ITU modules on-line, but it turned out I was not needed as so many good doctors have volunteered to fill the demand. Such good hearts saved the NHS. I continued working in covering lists to another hospital site which was classed as Covid free (Green), where we have now performed a number of open and laparoscopic liver resections; the first liver resections ever performed at this hospital location. This was not straightforward, requiring specific logistical considerations and training of theatre and ward staff. There has also been an avoidance of dual consultant operating sessions and limited consultant supervising, which has provided for an excellent training experience leading to greater depth of discussion about technique and approach to each case. Other aspects of the job including clinical and MTG involvement have not been affected, although day-case operating, which has not taken place since I arrived has taken a significant knock. Whilst this has not affected my operative skills development, it has impacted upon my ability to train junior colleagues, highlighting the potentially more significant impact that COVID is having upon trainees at the beginning of their surgical career.

In summary, my experience serves to demonstrate how forward thinking and cooperation between hospitals can keep the NHS working for patients with the added bonus of preventing unnecessary "graduate brain drain.”

Samir Danjii is a ST8 General Surgery trainee in London, who is dual specialising in Transplantation and Endocrine Surgery. During the first wave he was working at one of the largest transplant units in the country.

“At the end of January, we looked on with equal measures of curiosity and scepticism, as the mysterious Coronavirus silently circulated in China. By mid-February however, the extent of the global spread of coronavirus was impossible to ignore. We heard horrifying accounts of Italian doctors being treated in intensive care, the mystery of the Coronavirus becoming clearer. I performed 'ward rounds' of patients whilst on ITU; I got to know and care for the patients. I performed ‘ward rounds’ of patients whilst on ITU; I got to know and care for the patients, to as a surgeon. Learning about their struggles on dialysis and the impact on their families, was poignant and further validated the importance of what I do as a surgeon. Additionally, I learnt how to use a forklift truck, which was entertaining.

There were opportunities for innovation in the crisis. The ITU quickly ran out of filtering capabilities as patients were admitted with multi-organ failure. We were the first unit in the UK to adapt and utilise small mobile home dialysis machines and bring them into the patient’s bed space in ITU. We also undertook a study looking at the epidemiology of COVID-19 in the dialysis unit, providing a greater understanding of the disease process in the patient cohort.

I was also able to participate in the design of a phased return to transplantation. This involved synthesising a new Live Donor Transplant Program in the independent sector on a ‘Gold Pathway’. We designed multiple clinical pathways and instituted policies for patient preoperative shielding, the training of theatre personnel, specialist surgical instruments, tissue typing and specialised transplant assays, to mention a few.

The COVID pandemic has been the most extraordinary period of my career, providing many challenges and opportunities. At the same time, I operated very little, had the FRCS postponed and my CCT extended, however my other experiences have been unique and rewarding. As a result, I am a finer surgeon, a more caring physician, have greater resilience and I am a better father and husband.
These few paragraphs highlight the diversity in training experience throughout the UK at different levels. Each trainee will encounter different challenges that may be unique or particular to only a few, but it shows that we are recovering from the original effects of the pandemic. Ingenuity and forward thinking will allow training to continue with new solutions creating light at the end of the tunnel. If nothing more, the Covid crisis has shown the NHS’s determination and ability to adapt to some of the greatest challenges seen in our lifetime.

In October 2020 the Surgical Research Society formerly (SARS) hosted our rescheduled March 2020 meeting. The meeting was held on line every Tuesday and Thursday evening during the month of October culminating in our Prize Giving Session on Thursday 29th October following the Dragon’s Den’s presentations.

We had over 123 individual presentations with presenters from Australia, Botswana, Canada, France, India, Ireland, Kuwait, Spain, Switzerland, Tunisia, UK, USA. We were delighted to welcome the Prize Winners from the Society of University Surgeons (SUS) in America- Quoc-Hung Nguyen, the Surgical Research Society of Southern Africa (SRS(SA)) - Mipahp Joseph Motsumi and the European Society for Surgical Research (ESSR) - Guillaume Giudicelli.

Throughout the month every session was chaired by two Council members and our remaining Council members joined sessions to pose questions and finally score each presenter. This year we were delighted to be able to award prizes for every session due to the generous donations received from sponsors. A highlight of the meeting was the awarding of a 4,000 EURO prize fund to a collaborative group as the winner of the Dragon’s Den Session.

We have now opened the abstract submission portal for our next Annual Meeting which will be held on the 24th and 25th March 2021 and we encourage you all to start submitting. Abstracts can be submitted using the following link: http://surginet.org.uk/abstracts/

The programme outline is being finalised and will be shared on our website shortly http://surgicalresearch.org.uk/2021-annual-meeting/

A very interesting and stimulating programme complete with Expert Plenary Sessions is being planned. Registration for the meeting will be free for SRS members so we encourage you all to join.

A full list of all the winners from the October SRS 2020 meeting follows.

Patey Prize Winner:
AN EXPLORATION OF THE GENOME OF MUCINOUS ADENOCARCINOMA OF THE RECTUM
IS Reynolds (1,2), E O’Connell (1,2), M Fichtner (2), DA McNamara (1,3), EW Kay (4), JHM Prehn (2,5), SJ Furney (2,5,6), JP Burke (1)
1. Department of Colorectal Surgery, Beaumont Hospital, Dublin 9. 2. Department of Physiology & Medical Physics, Royal College of Surgeons in Ireland, Dublin 2. 3. Department of Surgery, Royal College of Surgeons in Ireland, Dublin 2. 4. Department of Pathology, Beaumont Hospital, Dublin 9. 5. Centre for Systems Medicine, Royal College of Surgeons in Ireland, Dublin. 2 6. Genomic Oncology Research Group, Royal College of Surgeons in Ireland, Dublin

Williams Prize and Database Research Winner:
EVALUATION OF AXILLARY LYMPH NODE METASTATIC BURDEN BY PREOPERATIVE ULTRASOUND
1 Department of Surgery, Royal College of Surgeons in Ireland, Department of Surgery, 123 St Stephen’s Green, Dublin, D02 YN77 2 Royal College of Surgeons in Ireland, Department of Surgery, Healthcare Outcomes Research Centre (HORC), Beaux Lane House, Mercer Street Lower, Dublin 2 3 Beaumont Hospital P.O. Box 1297, Beaumont Road, Dublin 9, Ireland

Burnand Prize and Translational Research Winner:
DEFINING CELL-ENRICHED MICRORNAs TO SUPPORT RATIONAL BIOMARKER SELECTION IN HUMAN RENAL TRANSPLANTATION
K Connor (1,2), O Teenan (1), R Thomas (2), V Banwell (1), S Finnie (1), ML Monaghan (1), C Cairns (1), G Tannahill (3), E Harrison (1, 2, 3), B Conway (1), L Marson (1,2), L Denby (1), S Wigmore (1,2)
(1) University of Edinburgh, (2) Edinburgh Transplant Unit (3) GlaxoSmithKline
ASiT Prize and Surgical Education Winner:

SO YOU WANT TO BE A ROBOTIC SURGEON? THE EFFECT OF BASELINE PSYCHOMOTOR ABILITY AND VIDEO-GAME EXPERIENCE ON ROBOTIC SURGICAL SKILL: A RANDOMISED CONTROL TRIAL

D Hay, K Ahmed, P Dasgupta, B Challacombe

MRC Centre for Transplantation, King’s College London, London, UK; (2) King’s Health Partners, Department of Urology, Guy’s Hospital, London, UK

Medical Student and Systematic Reviews Winner:

SYSTEMATIC REVIEW AND PROPORTIONAL META-ANALYSIS OF Survival FOLLOWING NEOADJUVANT CHEMORADIOThERApy AND LIVER TRANSPLANTATION IN UNRESECTABLE HILAR CHOLANGIOCARCINOMA.

WA Cambridge, RV Guest

University of Edinburgh

Dragon’s Den Session Winner:

“EuropeanInvestigation of Surveillance after Resection for Esophageal cancer”

Jessie Elliott

RCS(Eng) Research Fellows Symposium Winner:

THE CLIFF AND CONOR STUDIES – NOVEL ASSESSMENT TOOLS IN COLORECTAL LIVER METASTASES (CLIFF STUDY - CHANGE IN LIVER FUNCTION AND FAT IN PRE-OPERATIVE CHEMOTHERAPY FOR COLORECTAL LIVER METASTASES, CONOR STUDY

KL Parmar (1,2,3), C Sławinski (1,2,3), L Malcomson (1,2,3), D O'Reilly (4), JW Valle (1,3), M Braun (3), JH Naish (5), SR Williams (6), AG Rehen (1,2,3)

1. Division of Cancer Sciences, School of Medical Sciences, Faculty of Biology, Medicine and Health, University of Manchester 2. Manchester Cancer Research Centre, Royal Free London NHS Foundation Trust, London, United Kingdom 3. University of Southampton, UK 4. Department of Interventional Radiology, Royal Free London University College London, UK 5. Department of Urology, Royal Free London, UK

Breast Session Winner:

GREMLIN-1 PROMOTES TUMOURIGENESIS AND METASTASIS IN HER2 POSITIVE BREAST CANCER

C. Zabkiewicz, L. Ye, R. Hargest

Cardiff University

Basic Sciences Winner:

TARGETING THE RENAL TUBULAR EPITHELIUM WITH ANT-MIPIRA THERAPY, A POTENTIAL MECHANISM FOR MINIMISING ISCHAEMIA REPERFUSION INJURY


1. NIHR Blood and Transplant Research Unit, Institute of Transplant, Freeman Hospital (2) Institute of Cellular Medicine, Newcastle University

Poster Studies Winner:

THE IMPACT OF RADIOThERAPY ON PATIENT-REPORTED OUTCOMES OF IMMEDIATE IMPLANT-BASED BREAST RECONSTRUCTION: RESULTS OF A PROSPECTIVE MULTICENTRE COHORT STUDY

E. Sewart (1), N. Turner (1), E.J Conroy (2), R. Cutress (3), J Skillman (4), L. Whisker (5), S. Thrush (6), N. Barnes (7), C. Holcombe (8), S. Potter (1,9), on behalf of the IBRA Steering Group and the Breast Reconstruction Research Collaborative

1. University of Bristol, (2) University of Liverpool, (3) University of Southampton, (4) University Hospitals Coventry and Warwickshire NHS Trust, (5) Nottingham University Hospitals NHS Trust, (6) Worcester Royal Hospital, (7) Manchester University NHS Foundation Trust, (8) Royal Liverpool and Broadgreen University Hospital, (9) North Bristol NHS Trust

Poster Session 1 Winner:

EFFECT OF VITAMIN C AND COLD ON GROWTH FACTOR RELEASE FROM PLATELET-RICH PLASMA

T. Tomouk (1,2), S. Talaat (1,2), O. Smith (1,2), A. Mosahebi (1,2)

1. University College London; 2. Royal Free Hospital, London

Poster Session 2 Winner:

THE RELIABILITY OF VENOUS THROMBOEMBOLISM RISK ASSESSMENT TOOLS FOLLOWING FREE FLAP RECONSTRUCTION OF THE LOWER EXTREMITIES

L. Geoghegan (1), J. Super (1), S. Onida (1), S. Hettiaratchy (2), A. Davies (1)

(1) Department of Vascular Surgery, Imperial College NHS Trust (2) Department of Plastic Surgery, Imperial College NHS Trust

Poster Session 3 Winner:

EVALUATING AND DEVELOPING A TEACHING TOOL ON FAECAL INCONTINENCE IN THE UNDERGRADUATE MEDICAL CURRICULUM

CH Li(1), J. Parker(2), N. Reeve(2), J. Cornish(2)

1 University of Cardiff, Medical school 2 General Surgery, University Hospital of Wales, Cardiff

ASiT/SRS Preparing for a Career in Academic Surgery (P4ACS)

The Association of Surgeons in Training have been collaborating with SRS to produce high-quality podcasts and webinars to help trainees prepare for life as an academic surgeon.

Each podcast features a different research leader within the SRS council, exploring their journey, their insights into academic training and the challenges they have faced along the way. Over 500 listeners have joined the podcasts so far, with excellent feedback. These are available online at https://anchor.fm/surgical-research, in the Apple Podcast Library and on Spotify.

ASiT/SRS have also held their first P4ACS webinar in October with over 250 members of the live audience; more content is planned for 2021 and is free for all ASiT and SRS members. SRS in partnership with ASiT have also provided a National Research Collaborative grant (£4000) in a ‘Dragon’s Den’ session at their 2020 conference. This is the first step towards a long-term partnership between the two organisations aiming to foster mentorship and interest in academic surgical careers amongst trainees.

For anyone interested in collaborating or with content suggestions please contact the ASiT-SRS Trainee Representative, James Glasbey at j.glasbey@bham.ac.uk.
BJS Society journals join Oxford University Press in 2021
Adam Gilbert, Senior Publisher, Oxford University Press (OUP)

The BJS Society journals, BJS and BJS Open, will be published by Oxford University Press (OUP) from January 2021.

The BJS Society journals will be hosted online at BJS and BJS Open on the Oxford Academic platform. The new homepages will provide access to the latest published articles, archive content, and a range of supporting materials and new online features. They will also maintain access to the existing systems for submitting articles to the journals.

“We are excited that BJS and BJS Open are entering a new phase in their development by joining the OUP portfolio,” Camilla O’Brien, BJS Society Executive Director, said of the partnership. “We believe the digital capabilities and deep publishing experience of OUP will create new opportunities to expand the visibility and influence of the important research being published in our journals. And we expect that this partnership will allow the Society the freedom to explore new opportunities to better serve its strategic partner membership and support its mission.”

“OUP is delighted to be working collaboratively with BJS Society and looks forward to the future strategic development of their leading journals,” said Alison Denby, Vice President, Journals, at Oxford University Press.

BJS is the premier peer-reviewed surgical journal in Europe and one of the top surgical periodicals in the world. The journal features the very best in clinical and laboratory-based research on all aspects of general surgery and related topics.

BJS Open is a fully Open Access journal closely allied to sister journal, BJS. BJS Open publishes high-quality work on all aspects of general surgery and related topics and is of interest to general and specialty surgeons.

The BJS Society Ltd is a registered charity whose objectives are to advance and improve education in surgery and to diffuse knowledge on new and improved methods of teaching and practising surgery in all its branches. It does this primarily through the promotion of BJS and BJS Open, but it has also developed strategic European partnerships. The BJS Council of Management is drawn mainly from these partner surgical associations whose relationship has increased the Journals’ profiles and broadened their attraction globally.

OUP publishes more than 450 academic and research journals covering a broad range of subject areas, two thirds of which are published in collaboration with learned societies and other international organizations. OUP has been publishing journals for more than a century and, as the world’s largest university press, has more than 500 years of publishing expertise.

The Young BJS represents a community of early-career researchers with enthusiasm for surgical academia. The ethos is aligned with that of the BJS with a mission to promote excellence in clinical and scientific research. Specific goals of the group will be to network, educate, and innovate in surgical publishing on a global scale.

Structure
The Young BJS is led by surgical trainees under the guidance and governance of the BJS and BJS Open Editorial Teams and the BJS Society. Membership is free of charge and open to everyone from junior consultants to medical students.

So how can you get involved?
Enthusiasm is all that is required. Those interested in becoming part of Young BJS, please email your details including name, institution, career stage and specialty interest (if applicable) to admin@youngbjs.org. We will inform you of upcoming projects, educational opportunities, and collaborative efforts. We look forward to welcoming you.

The Young BJS Coordinating Team
On behalf of the BJS and BJS Open Editorial Teams

@young_bjs  @BJSurgery  @BJSOpen

cademic.oup.com/bjs
cademic.oup.com/bjsopen
The ASGBI and Pancreatic Cancer UK are delighted to offer a fellowship to support a Trainee or Junior Consultant with an interest in advancing the clinical management of pancreatic cancer. This individual will visit centres of excellence abroad and bring this experience back to the NHS to advance UK clinical expertise. The successful candidate will be offered a grant of up to £3,000 to assist with travel costs, accommodation, and to provide a reasonable living allowance for the period of Fellowship.

ASGBI fellowship programmes encourage apprenticeship style training. We recognise the value in mentorship and teaching surgery as a craft to develop skills and promote career development.

Eligibility
To apply, applicants must be:

- A current member of the ASGBI in good standing.
- Trainees or Consultant Surgeons (within first 5 years of their appointment) engaged in general surgery or one of its sub-specialties.
- Resident of the United Kingdom and Ireland.

The deadline for application has been extended due to COVID-19. Please visit the web site for the most up to date information.

Application Timeline

The aim of the ASGBI and Intuitive Surgical Robotic Fellowship, is to support Trainees and early career Consultants with an interest in robotic-assisted techniques to visit centres of excellence overseas, bringing back this new expertise to their teams in the UK. Successful candidates will be offered a grant of up to £5,000 to assist with travel costs, accommodation, and to provide a reasonable living allowance for the period of Fellowship.

ASGBI travelling fellowships promote the exchange of surgical knowledge and encourage the apprenticeship style training. We recognise the value of mentorship and collaboration in the surgical community with the ultimate aim of improving surgical care of patients.

Eligibility
To apply, applicants must be:

- A current member of the ASGBI in good standing.
- Trainees or Consultant Surgeons (within first 2 years of their appointment) engaged in general surgery or one of its sub-specialties.
- Resident of the United Kingdom and Ireland.

The deadline for application has been extended due to COVID-19. Please visit the web site for the most up to date information.
Surgical Sustainability

Introducing our Guest Editor
Miss Cleo Kenington

Cleo Kenington is a Consultant in Emergency General Surgery and Major Trauma at St. George’s Hospital, London. She is the London Rep on the ASGBI council and has taken on the role of lead for sustainability at the ASGBI. She was the first Social media editor for the ASGBI in July and August of this year. Outside of work she is a campaigner for safe cycle infrastructure and established the Campaign group Prescription for Safe Cycling.

Contributors

Richard Smith
Richard Smith is Chair of the UK Alliance on Climate Change. Richard is a former Doctor, and worked in hospitals in Scotland and New Zealand before joining the British Medical Journal – where he was Editor-in-Chief from 1991 until 2004. He continues to blog for the BMJ, and to publish regularly. Until 2018, Richard was Chair of the Board of Trustees of the International Centre for Diarrhoeal Disease Research, Bangladesh, and until 2015 he was Director of the UnitedHealth Chronic Disease Initiative – a programme coordinated by the National Heart, Lung, and Blood Institute, which created 11 centres in low and middle income countries to conduct research and build capacity to counter non-communicable disease.

Scarlett McNally
Scarlett has been a Consultant Orthopaedic Surgeon in Eastbourne, since 2001. She is Elected Council member (2011 – 2021) of the Royal College of Surgeons of England, Deputy Director, Centre for Perioperative Care (www.cpoc.org.uk) and Council member of UK Health Alliance for Climate Change (representing RCSEng). She was Trust Director of Medical Education 2008-2011. She has held committee positions in the STC, BMA, BOA, MWF, AoMRC and RCSEng. She has an MA in Clinical Education, an MBA in health service managment, a black belt (4th Dan) in Karate and Cambridge blue. She has 4 children and frequently speaks on behalf of Women in Surgery.

She aims for clarity and high standards, leading on an undergraduate curriculum for surgery and how to reduce bias and bullying. She was lead author for the Academy report: Exercise ‘miracle cure’, achieving institutional, community and personal change to improve health and fix the NHS, including active travel.

In 2018 she was diagnosed with Myeloma and cardiac amyloidosis. She has had almost continuous chemotherapy and built up her fitness with an electric-bike to be eligible for a stem cell transplant in September 2020. She is back at work part-time.

She uses her patient experience to challenge. She helped collate evidence showing dramatic reductions in complications with perioperative care interventions and pathways at the Centre for Perioperative Care where she is Deputy Director. More information on www.scarlettmcnally.co.uk, www.rcseng.ac.uk/study and www.cpoc.org.uk.

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Contributors

Andrew Tan
Andrew Tan is a consultant obstetric anaesthetist at Kingston Hospital, with an interest in the sustainable delivery of anaesthesia and peri-operative care. He has a particular interest in collaborative improvement methods, patient experience and co-design of services. Outside of work he can usually be found out running, usually uphill.

Arthy Hartwell
Arthy Hartwell is the Head of International at the British Medical Association, and leads the BMA’s international work on fair and ethical trade. She provides expert advisory support on global health and international development matters to international organisations such as the UN Sustainable Procurement in the Health Sector taskforce. Arthy sits on the editorial board for the BMA Global Health journal.

Andrew Gilliam
Mr Andrew Gilliam has been a Consultant Upper GI Surgeon at County Durham and Darlington NHS Foundation Trust since 2008. After Dundee University Medical School, he trained in Yorkshire, Trent and Northern regions. He is an Honorary Professor at Sunderland University and Senior Lecturer at Teeside University. He has served for over 30 years as an army reservist, deploying twice to Afghanistan.

Andrew is passionate about Sustainable Surgery and is engaged on a number of work streams covered in this article.

Introduction
Cleo Kenington, Consultant in Emergency General Surgery and Major Trauma at St. George’s Hospital, London

I remember as a child learning about the concept of climate change. It seemed like something that might happen a long time in the future and seemed quite theoretical, and while I always tried to switch off the light as I left a room and take my bottles to the recycling. It did not seem like something that would be important to me.

However this all changed in my mind when I learned about the report of the intergovernmental panel on climate change in 2018. The predictions of the scientists from 30 years previously had been almost exactly right. By 2018 we had reached 1°C of warming, and the sea levels had started to rise. At the current rate of change, the expectation for reaching 1.5°C a temperature after which irreversible changes are likely to start happening is by 2030. At that time my children should be just doing their A levels.

I have made significant changes at home to reduce my carbon footprint, however as soon as I walk through the door at work, that is all irrelevant, I have no option but to follow the process within the hospital.

Finding the route to carbon net-zero surgery
Richard Smith

Change is difficult and is resisted. Making change happen is hard, and the bigger the change the harder it is to achieve. Changing the NHS, which accounts for about 5% of Britain’s greenhouse gas emissions, to a carbon net-zero service, which means reducing emissions to as close to zero as possible and offsetting or sequestering the rest, will be hard. It will mean change in every part of the NHS, including clinical practice; and it means changing surgery, which is responsible for a substantial part of the NHS’s carbon footprint, to net-zero.

Years ago I learnt a simple formula for achieving change, which I’ve found remarkably useful for thinking about change. The formula says that three things are needed to achieve change: “a burning platform,” an understanding that it simply isn’t possible to go on in the usual way; a vision of what a better future will look like; and a plan that starts this afternoon on how to achieve change. All three are necessary. If one is missing then change won’t happen. I want to use this formula to help find a route to net-zero surgery.

Surgery’s burning platform

At the moment, I suggest, it doesn’t feel as if surgery is part of a burning platform. Recently I spoke at a meeting on the future of surgery, and those who had produced a report that came before the meeting had not considered climate change important when thinking about the future of surgery. This failure (and I think that it was a failure) might have two roots: a lack of appreciation of the gravity of the threat from climate change; and a thought that even if the threat is severe it’s not surgery’s problem. Both thoughts are wrong.
The Intergovernmental Committee on Climate Change (IPCC) has said that the world needs to reach net-zero by 2040 to avoid global temperatures rising more than 1.5 degrees Celsius above pre-industrial levels. Rises above that could result in catastrophic dangers, including not only deaths from extreme heat, fires, floods, storms, and spread of infectious disease but also mass migration through water shortages, crop failures, forced migration, and war over resources. To achieve net-zero by 2040 we need to cut greenhouse gas emissions by 7% a year, year after year. Until recently emissions were increasing by 7% a year and even in this year of the pandemic—with much of the global economy shut down—there will be only a 4-7% reduction in emissions. This shows how hard it will be to achieve annual reductions of 7%.

Achieving the necessary change means change at every level—from the global to the individual. Surgeons need to change both as individuals and clinicians. Although the authors of the report on the future of surgery may not have considered climate change, surgeons are waking up to the importance and urgency of climate change—at least in the UK. All three surgical colleges (England, Edinburgh, and Glasgow) and the Association of Surgeons of Great Britain & Ireland (ASGBI) are now members of the UK Health Alliance on Climate Change (UKHACC), and all three have held meetings and published on surgery and climate change—where the President is taking the lead. Whereas surgeons might unluckily have been described as laggards on climate change among health professionals, they are now becoming leaders.

But to achieve the burning platform necessary for change it requires the majority (and preferably the totality) of surgeons in every branch of surgery to recognise the need. The colleges and ASGBI supported by UKHACC are well positioned to lead on reaching every surgeon.

The Vision

NHS England has recently produced its detailed plan on how to reach net-zero as quickly as possible. No other health system has produced such a plan, and most health systems have rising not falling carbon footprints. The NHS plan includes the present carbon footprint, showing how almost two thirds of the two footprint arises from procurement (20% of the total being drugs, and 10% medical equipment, much of its used in surgery); anaesthetic gases and inhalers account for another 5%. The plan expects the NHS to reach net zero by 2040 with the carbon footprint being cut (with 80% reduction by 2028 to 2032) and by 2045 with the total footprint, including everything it procures, much of it from outside Britain (with an 80% reduction by 2036 to 2039). Although the plan is detailed and the targets realistic, there is a need for a more detailed plan for all parts of the health service, including surgery. This is where surgeons themselves need to take the lead, and the colleges, ASGBI, and other colleges, including the anaesthetists, nurses, and obstetricians and gynaecologists coordinated by UKHACC are forming a working party to produce a plan specifically for surgery.

We have an idea of what the plan will include, not least in that the Centre for Sustainable Healthcare (CSH) has laid out a broad route for reducing the carbon footprint of all clinical activities. One broad route is to avoid the need for surgery by encouraging prevention, patient empowerment, and recognising when surgery may not be the best option—for example, at the end of life—or not add enough value to the patient to justify the discomfort to the patient, the cost, and the carbon consumed. I’ve always been struck by the saying that “good surgeons know how to operate, better surgeons when to operate, and the best when not to operate.”

The second route to reducing the carbon footprint of clinical activity identified by CSH is to reduce the carbon intensity of the surgery that does occur. This means, as with any improvement project, calculating the carbon footprint of clinical pathways, and then reducing step by step the carbon consumption. Measuring the carbon footprint is not an exact science, but an increasing range of methods exist and are being developed.

Much of the carbon footprint of operations results from anaesthetic gases, and switching from desflurane to nitrous oxide reduces the carbon footprint of a total knee replacement by 58%. Further changes, including using regional rather than general anaesthesia and reducing waste, reduce the carbon consumption to 2.3% of the footprint using desflurane. The final step with the clinical team cycling rather than driving to work reduces it to 1.3% of the original carbon load. We need to go through this process for all surgical procedures.

The plan that starts this afternoon

The final necessity for successful change is to have a plan that begins this afternoon. Many surgical organisations are now working to reduce the climate footprint of surgery, and the role of UKHACC will be to coordinate the activity of those organisations through a working party on net-zero surgery. We have a plan on membership of the working party and how it will work (probably through several workstreams contributing to the whole), and are seeking funding. The two tasks of the working party will be to develop a plan, which will be shared as a report to all surgical teams describing what they can do to contribute, and to make the plan happen. The second task is the harder one; implementation is always hard, but surgeons are people of action who like to solve problems. Carbon net-zero surgery is coming, and that kind of surgery will be better not only for the planet but also for surgical patients.

Harnessing perioperative care, prevention and cycling to improve sustainability in surgery

Mrs Scarlett McNally

Actions to improve sustainability can be categorised as: reduce, reuse or recycle. Reducing ill-health through prevention uses far fewer resources than surgery. It may be that the temperature of NHS healthcare presumes patients with single-issue conditions undergo optimal surgery with no expense spared. With most surgical patients are older with multiple co-morbidities. There are wide variations in surgical outcomes, operations undertaken, complications, re-admissions and re-operations.

Reducing in operations, complications or on-going ill-health reduces expenditure as well as social costs. More patients will be eligible for surgery, far more patients will be eligible for day surgery—there is a three-fold variation in proportion of patients admitted for operation with overnight stay rather than as a day case between the highest and lowest decile of costs. After decades as a doctor, most surgeons can identify patient issues, potential complications and poor outcomes. Yet we may not realise that many risk factors are highly modifiable. Most complications are predictable. 10% of outcomes result in a complication, but there is clear evidence that pre-operative patient preparation, such as a daily exercise programme, reduces complications by 30% to 80%.

The best studies are in cancer surgery, with highly effective prehabilitation programmes showing results within 4 weeks. Smoking cessation reduces complications by 20% to 50% in 3 to 4 weeks. There are a finite number of interventions that reduce complications at this ‘teachable moment’: nutrition, exercise, smoking cessation, alcohol reduction, psychological preparedness, practical preparation. Shared Decision Making shows where we could do better. Surgeons should use their status as trusted professionals to embrace the prevention agenda. Although others within the team may help patients with detail, unless surgeons verbalise actions these will not be considered important. With more attention to pre-operative preparation for surgery, far more patients will be eligible for day surgery—there is a three-fold variation in proportion of patients admitted for operation with overnight stay rather than as a day case between the highest and lowest decile of costs. Many surgical organisations are now working to reduce the climate footprint of surgery, and the role of UKHACC will be to coordinate the activity of those organisations through a working party on net-zero surgery. We have a plan on membership of the working party and how it will work (probably through several workstreams contributing to the whole), and are seeking funding. The two tasks of the working party will be to develop a plan, which will be shared as a report to all surgical teams describing what they can do to contribute, and to make the plan happen. The second task is the harder one; implementation is always hard, but surgeons are people of action who like to solve problems. Carbon net-zero surgery is coming, and that kind of surgery will be better not only for the planet but also for surgical patients.

Harnessing perioperative care, prevention and cycling to improve sustainability in surgery

Mrs Scarlett McNally

Actions to improve sustainability can be categorised as: reduce, reuse or recycle. Reducing ill-health through prevention uses far fewer resources than surgery. It may be that the temperature of NHS healthcare presumes patients with single-issue conditions undergo optimal surgery with no expense spared. With most surgical patients are older with multiple co-morbidities. There are wide variations in surgical outcomes, operations undertaken, complications, re-admissions and re-operations. Sadly, as Getting It Right First Time (GRFT) reports “surgery is being offered in situations where successful outcomes are compromised.” Reduction in operations, complications or on-going ill-health reduces expenditure as well as social costs. A number of interventions that reduce complications at this ‘teachable moment’: nutrition, exercise, smoking cessation, alcohol reduction, psychological preparedness, practical preparation. Shared Decision Making shows where we could do better. Surgeons should use their status as trusted professionals to embrace the prevention agenda. Although others within the team may help patients with detail, unless surgeons verbalise actions these will not be considered important. With more attention to pre-operative preparation for surgery, far more patients will be eligible for day surgery—there is a three-fold variation in proportion of patients admitted for operation with overnight stay rather than as a day case between the highest and lowest decile of costs. After decades as a doctor, most surgeons can identify patient issues, potential complications and poor outcomes. Yet we may not realise that many risk factors are highly modifiable. Most complications are predictable. 10% of outcomes result in a complication, but there is clear evidence that pre-operative patient preparation, such as a daily exercise programme, reduces complications by 30% to 80%. The best studies are in cancer surgery, with highly effective prehabilitation programmes showing results within 4 weeks. Smoking cessation reduces complications by 20% to 50% in 3 to 4 weeks. There are a finite number of interventions that reduce complications at this ‘teachable moment’: nutrition, exercise, smoking cessation, alcohol reduction, psychological preparedness, practical preparation. Shared Decision Making shows where we could do better.
The key is for the patient to be supported to explain their expectations. 14% of patients report regret after surgery. Patients can be encouraged to ask ‘BRAN’ – what the Benefits, Risks and Alternatives or what happens if they do Nothing. Many will feel empowered to try interventions that improve their outcome. With good discussion a proportion of patients do not proceed with surgery and others are more committed to their preparation.

Perioperative care is from the moment surgery is contemplated to full recovery. Effective perioperative care teams reduce length of stay by a median of 2 days. There are multiple staff involved across different phases, but actively creating meetings and sharing goals, data and skills can be hugely beneficial. Paradoxically, a traditional approach lauding ‘Multi-Disciplinary Teams’ can create silos, with reverence paid to the specialty practitioners and gaps in skills if these personnel are not available. For perioperative teams crossing boundaries and including administrative, managerial and clinical staff, a new ‘transdisciplinary’ approach is suggested where staff share skills. A perioperative team approach can be used for emergency surgical pathways as well as for elective surgery. Hip fracture care has been transformed by a standardised understanding. Even for emergency patients it is possible to create a generic pathway that has co-benefits of reducing waste, improving patient outcomes, giving good quality patient information and improving staff education and empowerment.

Operating theatres generate the most waste and use 3 – 6 times as much energy as the rest of a hospital. A single operation has the carbon footprint of a trans-Atlantic flight (up to 814kg carbon dioxide equivalents). Many items used in operations are now mandated as single use, with extensive environmental issues around procurement and disposal including incineration of plastics. Health organisations should collectively use their understanding of risks to challenge the poorly evidenced infection control policies that have led to a single-use culture.

Alternative processes, such as re-sterilisation, need organisational support.

The NHS employs 1.4 million people and each should be a role model for sustainability and good health. 5% of traffic on UK roads is on NHS business. One third of the UK population does not achieve the minimum of 150 minutes per week of exercise for health. This amount reduces an individual’s risk of dementia, depression and stroke by 30%. A small modal shift from car and van use to active travel (cycling and walking) is the most consistent way to incorporate exercise into daily life. This would have co-benefits of reducing fossil fuel usage, reducing pollution, increasing mental and physical health and reducing fuel or transport poverty. Pollution contributes to strokes, heart disease, cancer and respiratory diseases. Less motorised traffic would also reduce road collisions. 160,597 people were injured on British roads in 2018, including 27,000 who were killed or seriously injured, making road traffic collisions a larger health problem then many diagnoses. Public sector estates should include cycle lanes, pavements, secure cycle parking for staff, easy bike racks for visitors and storage space for wet equipment. Showers may be needed for those who cycle or run far or fast. Swapping from petrol or diesel to electric cars is insufficient since particulate pollution from brake and tyre wear, related to the weight of the vehicle, is a major contributor to ill health and the lifetime environmental cost of each car and battery is considerable.

The impact of motorised transport on the environment and health cannot be overstated. The NHS should take on its mantle as an anchor institution. 34% of primary school children are driven to school and one-third of children start secondary school overweight or obese, with increased incidence of adult obesity and future worse health. 56% of car journeys are under 5 miles, a distance highly amenable to cycling. 62% of UK adults describe roads as too dangerous to cycle in normal times. Electric-cycles have transformed possibilities, allowing hills and distances to be tackled with ease. Older and disabled people get the same health benefits when starting using electric cycles as ordinary cyclists and voluntarily convert more car use items with alternative evidence and processes balancing risks.

In summary, surgeons can embrace sustainability at many levels, with individual patients, in their practice and in their lives. The most effective actions for sustainability are those that reduce waste, surgical complications and motorised transport (figure 1).

<table>
<thead>
<tr>
<th>In summary, surgeons can take to increase sustainability</th>
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<tbody>
<tr>
<td><strong>By surgeon with patient</strong></td>
</tr>
<tr>
<td>• Maximise preparation for surgery: daily exercise, nutrition, psychological preparedness.</td>
</tr>
<tr>
<td>• Shared Decision Making with patients: Benefits, Risks, Alternatives and doing Nothing ‘BRAN’</td>
</tr>
<tr>
<td><strong>With team</strong></td>
</tr>
<tr>
<td>• Change expectations</td>
</tr>
<tr>
<td>• Create a team from all staff across perioperative care</td>
</tr>
<tr>
<td>• Empower every staff member to understand other’s roles, with ‘transdisciplinary working’ sharing skills rather than ‘multidisciplinary working’ which can reinforce silos.</td>
</tr>
<tr>
<td>• Encourage motivational interviewing eg <a href="http://www.movingmedicine.ac.uk">www.movingmedicine.ac.uk</a></td>
</tr>
<tr>
<td>• Ensure good patient information</td>
</tr>
<tr>
<td>• Create clear pathways</td>
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<tr>
<td><strong>In community or workplace</strong></td>
</tr>
<tr>
<td>• Support active travel (walking and cycling)</td>
</tr>
<tr>
<td><strong>As surgical institutions</strong></td>
</tr>
<tr>
<td>• Follow UK Health Alliance on Climate Change <a href="http://www.ukhealthalliance.org">www.ukhealthalliance.org</a></td>
</tr>
<tr>
<td>• Challenge ‘infection control’ policies that mandate single use items with alternative evidence and processes balancing risks</td>
</tr>
<tr>
<td>• Highlight co-benefits for health: reduced pollution, increased exercise</td>
</tr>
</tbody>
</table>

REFERENCES
Climate change is real

Andrew Tan

We live on a planet that is hotter than ever, with more carbon dioxide in the atmosphere, and more extreme weather events than ever before. The climate crisis poses a major threat to our planet and to all of us, with direct and immediate consequences for the public, patients and global health. Climate change and air pollution are linked to conditions like heart disease, stroke and lung cancer, contributing to around 36,000 deaths annually.

For many of us, 2019 was a year defined by our collective recognition for the need for climate action, crystallised in the actions of Greta Thunberg and the Extinction Rebellion groups. Almost all of us have taken some actions in our lives to mitigate our impact on the environment - be that recycling, reducing plastic usage, cycling or changes to our diet - but have you considered the impact that your professional practice has on climate change and the environment?

The NHS long term plan to ‘net zero’

An increasing number of NHS trusts and royal colleges have declared a climate emergency, recognising the impact of climate change on our health. NHS England has committed to achieving a reduction in healthcare emissions to achieve ‘net zero’ by 2040, alongside the governments commitment to achieving UK net zero emissions by 2050. However you feel about these commitments and the methodology laid out as a pathway to achieving them, the goals are admirable and the NHS becomes the first major healthcare service to fully commit to these goals. Currently, the NHS is responsible for around 5% of the UK’s total emissions, figure 1 highlights the breakdown of NHS emissions.


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Taking a closer look at the figures, you will notice that medical instruments and pharmaceuticals form a large proportion of emissions. This is across specialties and practice. Looking further down the list, the only medical specialty addressed by name is anaesthesia, with gases alone contributing to 1.7% of total NHS emissions. The NHSL long term plan, announced in 2019, also singles out anaesthesia - challenging the specialty to “deliver 2% of this reduction [to net zero by 2040] by transforming anaesthetic practices”.

How anaesthesia contributes to climate change

So why is anaesthesia so disproportionately represented? Unfortunately the answer lies largely in one of the core aspects of our work - anaesthesia gases. We are one of the sole licensed users of halogenated-fluorocarbons, or as you may know them ‘CFCs’. Once used for the maintenance of anaesthesia, gases are scavenged from the anaesthetic machine, and vented into the atmosphere. It is here that they do their damage, by reflecting infrared radiation back onto the earth ‘trapping’ it in the atmosphere and contributing to global warming. The particular issue with anaesthetic gases and nitrous oxide is that they reflect infrared radiation in the wavelength of 8-14um, at which there is normally an ‘atmospheric window’ in which natural gases in the atmosphere, such as water vapour and carbon dioxide, allow radiation to escape cooling the earth. The warming effect of anaesthetic gases is further amplified by their atmospheric lifetime - once vented they do not escape or degrade, but exist in the atmosphere for years. In the case of nitrous oxide, it is also responsible for releasing water and destroying ozone in the atmosphere.\cite{2,3} Figure 2 demonstrates the environmental impact of a single hour of anaesthetic gas usage with reliable references to driving a standard family car (personal calculations).

The average UK citizen is responsible for around 25kg of CO2e per day. Changing one’s home life to that of a very green citizen (vegan, cycles to work, no children, does not use air travel etc) can reduce this by about 7kg to 18kg. By the nature of their work, an anaesthetist is responsible for up to 500kg of CO2e per day. ‘Greening’ their practice can reduce this to 165kg - an enormous saving of 335kg - dwarfing the impact of any other changes.

**Figure 2. Comparison of anaesthetic agents.** The GWP100 is the global warming potential of a gas over 100 years, as a factor of CO2 (GWP100 CO2 = 1). The CO2e is the amount of CO2 required to achieve the degree of warming caused by a given quantity of a gas. A comparison with driving a standard family car is given for context.

### Table: Comparison of Anaesthetic Agents

<table>
<thead>
<tr>
<th>Anaesthetic</th>
<th>GWP100</th>
<th>CO2e per day</th>
<th>Miles per MAC-hour**</th>
<th>GWPco2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isoflurane</td>
<td>760</td>
<td>196</td>
<td>3.9</td>
<td>510</td>
</tr>
<tr>
<td>Sevoflurane</td>
<td>988</td>
<td>1,229</td>
<td>4.8</td>
<td>130</td>
</tr>
<tr>
<td>Desflurane</td>
<td>3,391</td>
<td>99.5</td>
<td>99.5</td>
<td>2,546</td>
</tr>
<tr>
<td>Propofol 1% (Marsh)*</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desflurane</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sevoflurane</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isoflurane</td>
<td>0.13</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

\*For equated for a 10kg CO2e 65 year old at maintenance infusion rate
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Miles per MAC-hour is a measure of anaesthetic using anaesthetic gases, as a reference to how many miles a standard family car would drive on a certain amount of gas.

**Figure 2. Comparison of anaesthetic agents. The GWP100 is the global warming potential of a gas over 100 years, as a factor of CO2 (GWP100 CO2 = 1). The CO2e is the amount of CO2 required to achieve the degree of warming caused by a given quantity of a gas. A comparison with driving a standard family car is given for context.

### Revolutionising anaesthetic practice

So is changing the way we deliver anaesthesia possible and worthwhile? In the end the key is for anaesthetists to bridge the ‘moral gap’ between what happens when we turn on the vapouriser, and how this impacts the environment and our long term health. Figure 2 clearly demonstrates the differences between choices of anaesthetic in terms of their effect on the environment. Clearly, desflurane does the most damage but there are occasions when it may be clinically the best option, however in the authors opinion, its routine use has become too widespread and it should be reserved for only a few particular scenarios. As you can see total intravenous anaesthesia with propofol (TIVA) has the lowest GWP by some distance - 30 times lower than sevoflurane and more than 750 times less than desflurane, yet only 6% of general anaesthetics in the UK were conducted using TIVA.\cite{4,5} The lowest impact operations are those that occur under local or regional anaesthesia - avoiding any general anaesthetics at all. The small amount of disposables used for this sort of case is a drop in the ocean relative to the impact of anaesthesia gases. Both the Royal College and Association of Anaesthetists have been running campaigns to raise the awareness of the environmental impact of anaesthesia, and supporting greener practice with education.

### You and your practice

Consider your own daily operating practice, from start to finish. You travel to work, perhaps by car, at work you see the patients for that list - each of which has already had several appointments with surgical teams, pre-assessment, radiology and so on. That patient is also seen by nurses, anaesthetists and other members of the MDT - all of whom leave a similar trail of contacts. Investigations such as imaging, blood tests etc will also have been carried out. Whilst each of these interactions is likely to be necessary in delivering optimal care, consider that as well as the financial cost of each of these interventions, they each come with a ‘carbon cost’, from manufacture, implementation and disposal.

Much of that described above refers specifically to anaesthesia and the general conduct of operating theatre practice. So how could a reader of this journal ‘do their bit’ in their professional practice? In my view, the role of the surgeon can be impactful in a few ways. First, reducing the number of unnecessary operations - making sure that patients are only followed up as often as required, virtually if possible. Avoid requesting or repeating unnecessary investigations that not only cost but come with carbon consequences. Secondly, avoiding general anaesthesia where possible are only listed for necessary procedures, and always consider if this is possible under local or regional anaesthesia. Support and advocate for your anaesthesia colleagues in choosing regional anaesthetics where possible. Finally, advocating for greener practice is a crucial part of all of our jobs - role model to junior staff and support anaesthetic and theatre staff in ensuring efficiency of equipment use, waste disposal and theatre utilisation.

### Implementing greener practice

Discussing implementation and change methodology lies beyond the scope of this article, but to begin ‘greening’ your practice, start with the familiar “5 Rs”. What you may notice is that many of the ideas for more environmentally friendly initiatives, are also likely to be cost saving initiatives - for example reduce or stop use of orange bags. Clinical waste costs around £17.5/kg versus 15p/kg for recycling, so ensuring waste is disposed of correctly is a huge cost saving measure given the average operation generates over 10 bags of waste.

Underscoring financial implications may also help generate buy in from managers and leaders, or help support the initial investment required for some aspects of positive environmental change.

Outlined below are some pointers and questions to consider for each of the “5 Rs” to support your delivery of greener surgical care.

### Rethink - is this operation necessary? Is it possible under local/regional? Could I do this appointment virtually? Foster a culture where the green thing is the right thing, and the easiest thing to do.

### Research - are there alternatives to operative intervention? What are the environmental implications of my equipment / medications / interventions?

### Reduce - how can I do this in the least wasteful manner? Can I use less equipment to the same effect? Do I really need to order this investigation? Only open equipment when needed - and accept this may result in minor delays.
Reuse - consider if single use equipment (e.g. laparoscopic instruments) is the best option, avoid single use cups when buying your anaesthetist a coffee.

Recycle - ensure your theatre is furnished with appropriate bins, and support staff in appropriate waste disposal. Use recyclables where possible, advocate for procurement of equipment with a lower impact e.g. paper instead of plastic trays.

Examples from a Green Theatres project

At St Georges, a group of clinicians came together with the aim of increasing the sustainability of theatre practice. Crucially, this group involved representation from anaesthesia, surgical, nursing, facilities and management staff. Engaging each group of stakeholders was integral to understanding individual challenges and ensuring implementation was embedded within groups who each presented a variety of priorities and challenges.

The anaesthesia interventions began with a programme of education, highlighting in detail the relative polluting effects of anaesthesia gases. Desflurane vapourisers were removed from the anaesthetic machines as standard - a ‘nudge’ to avoid its use, but it remained available on request when clinically indicated. A series of infographic posters were provided in each anaesthetic room to help remind and educate clinicians to make greener choices in their practice (fig 3.). Pre-packed and diluted emergency drugs were procured to avoid the daily waste of drawing up and discarding them. A series of theatre staff team training sessions were dedicated to understanding how best to dispose of waste, and facilitating this by providing the correct bins in each theatre area. Surgical packs for minor procedures containing single use plastic trays have been replaced with those using cardboard and recycled materials. A small grant from the hospital charity has been won to provide theatre staff with reusable hats, plastic bottles in the coffee room have been replaced with mugs and all anaesthetic trainees are provided with reusable coffee cups.

Conclusions

We are a generation living on the tipping point of the climate crisis - adjusting our lives and our professional practice to reduce our impact on the environment is crucial to protect the health and wellbeing of ours and future generations. In many cases, our clinical practice has a greater impact than that of our home lives and deserves to be considered and adjusted as such. Whilst we focus on recovering from the global pandemic and reinstating surgical services for our patients that desperately need us, let us consider their future - we have an opportunity to learn, change and deliver a greener recovery that safeguards global future health.

Exposing a trillion-dollar industry – the human cost of surgery

Anhy Hartwell, Head of International, British Medical Association

Healthcare is a big business. Unsurprisingly goods and commodities are one of the biggest healthcare spenders – and it is suggested some trillions of dollars are spent on medical supplies, globally every year.

But what about the human faces behind this market?

For example, do you see a 7 year old boy working on a grinding wheel making surgical instruments? Or a migrant worker who has worked 12 hours a day, 7 days a week wearing gloves for a coles factory? Both are victims of worker abuse.

Research carried out by the British Medical Association has revealed unfair and unethical working conditions in the manufacture of a number of medical products, especially those bound for the operating rooms. The operating room being the largest user of medical supplies within the hospital, typically accounts for a third of all hospital supply cost. Abuses of labour standards have been documented in the manufacturing of many high-throughout supplies, including latex and PPE. It is estimated that some 150,000 manual labourers working in this industry in northern China, are produced in the pandemic. It is reported that Uighur people detained within labour camps have then been placed in factories to make face masks, and other pieces of PPE.

Global demand and competition for medical products, have turned human labour into a commodity and labour standards have simply become secondary to price.

Take the example of surgical instruments. Thousands of these products are used in every day in operations throughout the UK. A growing proportion of the simple surgical instruments, such as scissors and forceps, that reach your hands in routine surgery, have been produced in the Sialkot region of Pakistan. Here, there are an estimated 150,000 manual labourers working in this industry, within formally registered factories and backstreet worksites that are unregistered – known as the informal sector. In fact, it is estimated that 95% of production is outsourced to this informal sector. Taking a look at a typical profile of a labourer in this industry; they will work twelve hours a day, seven days a week and earn around $2 per day.

Figure 3. Example of greener anaesthesia posters used in anaesthetic

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There is evidence of child labour working in hazardous roles, and reports of discrimination, abuse and exploitation. Now, if we look at working environment; workers often risk exposure to metal dust, noise and toxic chemicals, injury from heavy machinery, and repetitive strain injuries.

Increasingly the production market for medical goods, are global. Manufacturing are outsourced to less affluent regions of the world – which brings huge economic benefit to a country. For example, the surgical instruments industry contributes 0.13% to the national GDP, and provides employment for thousands of its citizens. There is increasing evidence however, to show that globalisation of trade, has led to increased income inequality in a country, and that income inequality is a greater determinant of poor health and mortality than poverty alone.

So how do start to address this. Modern approaches to addressing labour rights abuses focus on models of ‘ethical trade’. Working to make international trade work better for those less advantaged – ethical trade is a top-down approach, and refers to the steps that purchasing organisations, such as hospitals take to improve the pay and conditions of people involve in the supply of goods and services.

It asks purchasers to systematically assess the risk of labour rights abuses in the goods they procure, to push for improvement where necessary. This includes working with companies throughout the supply chain to help workers exercise fundamental rights such as the right to safe and decent working conditions.

The healthcare sector presents a huge opportunity, owing to its significant purchasing power, to foster sustainable improvements in the working conditions for workers globally, promote decent work for all, and eradicate modern slavery from within its supply chains. Globally, further pressure and accountability is added by the UN Guiding Principles on Business and Human Rights.

There is an onus on businesses to minimise human rights violations, and a duty to adequately address any abuses that do occur. Together with the UN Sustainable Development Goals, and the prominence procurement has been given within this agenda, this has triggered a shift in focus towards labour standards in global supply chains. The regulatory environment is closing in and shaping the market, bringing with it the opportunity to embed a zero tolerance principle towards labour rights abuses.

Climate change does not respect borders; it does not respect who you are - rich and poor, small and big. Therefore, it is what we call `global challenges,' which require global solidarity. `Ban-Ki Moon,’ former UN Secretary General.

Globally, the healthcare sector’s climate footprint is equivalent to 4.4% of global net greenhouse gas emissions and in the UK, healthcare is responsible for 5.4% of the country’s net emissions. The NHS alone is responsible for around 20 million tonnes of carbon dioxide emissions annually and has to spend over £50 million a year on carbon permits. The UK government has committed to reaching net zero carbon emissions by 2050. The health and social care sector produces approximately 6% of England’s greenhouse gases and the National Health Service (NHS) has pledged to ‘go net carbon zero’ as soon as possible.
The COVID-19 pandemic has exacerbated the carbon footprint generated by medical waste disposal, forcing the cancellation of elective surgery. While landfill and sharps waste has halved in our Trust due to lower theatre activity, incinerated clinical waste has more than doubled. The volume of cardboard waste has conversely increased because of packaging for personal protective equipment (PPE) but recycling bins have been removed from frontline care areas as they are considered an infection risk.

During the pandemic, it is important that NHS staff receive environmental awareness training to reduce the amount of any unnecessary high environmental impact waste, for example, by donating reusable sterilized gowns.

Our Trust has examined each step of the patient journey into pre-operative, theatre and post-operative phases, balancing patient outcomes against the ‘triple bottom line’ (environmental, social and financial sustainability). Most improvements in sustainability in surgery can be achieved by focusing on the ‘reduce’ part of the reduce, reuse, recycle triad. The Centre for Sustainable Healthcare’s four principles of sustainable clinical practice, adapted for a surgical setting are:

1. Surgical disease prevention and Patient education

Our Trust has adopted a Cycle to work scheme to reduce carbon footprint and improve health with the financial benefit of tax savings to the individual. Healthcare professionals adopting healthy, low carbon transport demonstrates leadership by example, we refer most patients with a BMI-35 with co-morbidities and >40 without, to the Tier 3 (community based, structured, multidisciplinary) weight management program prior to most planned elective surgery, not just bariatric surgery. This provides patients with long-term healthy lifestyle advice and practical assistance (e.g. cooking classes).

2. Lean service delivery

We have examined unnecessary interventions in our surgical pathways and removed them (equipment, time, space and workforce) for example by organising pre-operative assessment for surgery on the same day they are booked for surgery in outpatients. We use virtual/telephone clinics to reduce staff and patient travel to hospital. For patients undergoing cholecystectomy, we avoid blood group and save samples for patients on the day of surgery and only selectively request histological examination of the specimen after macroscopic examination in theatre. Minimising hospital visits and blood tests as well as the travel distance to appointments by outreach clinics in community hospitals in County Durham has improved patient compliance and clinical productivity. Reduced water use can be achieved by adopting use of contactless infra-red sensor mixer taps in theatres. Theatre equipment should only be opened when required on not ‘just in case’. Good quality pre-operative briefing can prevent this. For example, when administering local anaesthetic at the end of a case, theatre staff are reminded to re-use one syringe rather than open two for a 30ml dose.

3. Low carbon treatment options

Reusable perioperative equipment and linen generate a lower carbon footprint than single-use equivalents despite the need for sterilisation. Theatre trays have been examined by surgeons and redundant or little used instruments have been removed to simplify the sets, reduce the count time and unnecessary repeated sterilization. Procurement from local suppliers is key with our most commonly used laparoscopic surgical equipment manufactured <50 miles from our Trust acute sites and our surgical gowns laundered <20 miles from our acute sites. Early and full engagement in the procurement process is key to champion sustainable alternatives.

Where reusable items are clinically inappropriate, we use ‘reusable’ surgical devices (reusable items with single-use components or semi-reusables). The instruments are of the same quality but generate 80% less plastic waste and are less than half the price (saving our Trust over £66K for cholecystectomies in 2019 alone). Some surgeons who do not use an open laparoscopic primary port introduction technique need to use a disposable port in their practice but these disposable ports can be used for the vast majority of laparoscopic procedures.

Single-use items should only be used when infection risk is associated with reusable equivalents or where a reusable equivalent is unavailable. For example, at present, our only option for certain personal protective equipment (PPE) is to use single-use items (eg gloves and filtering facepiece respirators). We have reusable fluid resistant gowns, eye visors and face shields available in our Trust that are effective in preventing infection however some disposable gowns have been used due to the recent surge in demand. For example, by donating reusable sterilized gowns.

4. Recycle

A large proportion of waste generated in theatres is recyclable and we facilitate this process by putting posters next to waste and recycle bins that are conveniently located throughout theatres and regularly remind staff of the need for environmental protection. Whilst COVID-19 has undoubtedly put the biggest strain on services the NHS has seen, it has shown how, when needed, it can rapidly reform to tailor bespoke local solutions. From our work, it is clear that empowering Trusts across the country to do things differently can create lasting, positive change. The COVID-19 crisis provides new opportunities to change the way we treat population health more broadly - as resources continue to be pumped into the NHS, it would be a huge waste not to capitise on this now. As we collaborate to reform services, we must also focus resources more broadly on the prevention of disease in the first place through education and pathways, promoting healthy lifestyle choices to prolong life among the population as a whole.

This devastating pandemic could in fact be a watershed moment in creating the social and political motivation to reform existing services for the long term and build a system that values health equality.

What an achievement to be able to reflect back on when we remember the early 2020s as the era of COVID-19, but it was also the period in time that saw meaningful change in tackling climate change as one biggest global challenges of the 21st Century. For those that have died during the pandemic and those that mourn them, let us work hard to deliver environmental protection in their memory.

References

Clinicians have received minimal technical and strategic support with digital tools during this accelerated transformation. Secondary care was handed suboptimal solutions and urged to ‘figure it out’. Patients are asked to join an unfamiliar digital environment, increasing their security concerns.

Visiba Care is a virtual clinic platform developed for healthcare and available to patients with your own name and brand. Our platform enables healthcare professionals to digitally transform clinical pathways, affording them a wide range of customisability to suit the unique needs of each healthcare provider. Visiba is also a strategic sounding board, with digital transformation experts apt to support you in strategising your digital pathways securely for maximum efficiency, today and in the long term.

Your virtual clinic reflects your visual identity and is available as a free app or web portal, that enables you and your patients to meet via a video appointment with up to 10 participants, send asynchronous messages, pre- and post-consultation forms as well as operate drop-in rooms – with all functions customisable for each reception.

Visiba Care is free for ASGBI consultants. Don’t hesitate to reach out to explore how quality online consultations can transform your practice.

Visit us to find out Visiba Care and how other healthcare providers have transformed their patient pathways

Your patients. Your virtual clinic.

Digital health can be one of the most valuable assets for secondary care during the pandemic – so why has it been a hassle for patients and clinicians alike?

Visit us to find out Visiba Care and how other healthcare providers have transformed their patient pathways
Experiences with COVID-19

The number of cancers per week diagnosed in symptomatic clinic at The University Hospitals Plymouth; an evaluation as to how our service has been adapted during COVID-19

Chrystal Jumbo, Stephanie Jenkins
Derriford Hospital- University Hospitals Plymouth NHS Trust, Primrose Breast Care Centre, Plymouth, United Kingdom

Background

Breast cancer is the most common malignancy in women globally. Being confronted with challenges in continuing to provide an efficient and effective service during a pandemic is inevitable. The COVID-19 pandemic has seen many countries quickly making adaptations to their cancer services, and healthcare systems have been interrupted in order to reallocate workers. In response to this pandemic the Breast Care service at University Hospitals Plymouth (UHP) has been amended in line with the guidance from the Royal College of Surgeons (RCS) and Association of Breast Surgery (ABS) (ABS 2020, RCS 2020). Previously our Breast Care Unit ran 4 operating lists per week, accommodating symptomatic, screening and surveillance patients that required operations. During COVID-19, all screening and surveillance has been put on hold. Our operations are now being done off site in what is called a “cold” hospital (a site with no acute COVID-19 patients). This means theatre lists are limited.

Aims and Objectives

The aim of this audit was to evaluate whether the changes implemented to our service, were safe and accommodated the demands during the COVID-19 pandemic. By extrapolating figures from the last year of symptomatic (one stop) clinics we can determine approximately the number of symptomatic cancers that will need operating on. This will identify whether the two theatre lists allocated during COVID-19 are sufficient, to accommodate the number of cancers that could potentially be diagnosed.

Method

One stop clinics by all of the surgeons at UHP provided over a 12 months period (Jan 2019 – Dec 2019) were reviewed (approximately 459 one stop clinics). Screening and surveillance was excluded. Data regarding the number of cancers diagnosed was collected retrospectively. Multidisciplinary Team (MDT) meeting agenda lists were interrogated to identify the symptomatic patients that had biopsies. The biopsy results data was collected using hospital electronic records, in the form of i.Clinical Manager (i.CM) and i.Laboratory. The number of diagnosed symptomatic cancers each week was identified. The total was averaged, and this figure was used as the marker for the target number of operating lists required each week, based on the number of cases per week that a surgeon can do. Incidental computerised tomography (CT) findings of inpatients were included in the data.

Results

369 cancers were diagnosed in symptomatic clinic from Jan 19 – Dec 19 (See graph 1). This averages a weekly diagnosis of 7.2 per week. This indicates that 2 operating lists per week is suitable, bearing in mind that some patients would not be fit for surgery due to factors including but not limited to, being high risk, comorbid or having

Graph 1. Number of symptomatic cancers diagnosed in 2019

<table>
<thead>
<tr>
<th>Average cancers per week</th>
<th>7.235294118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>14</td>
</tr>
<tr>
<td>Lowest</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2. Shows the average no. of cancers diagnosed

Conclusion

This pandemic has forced healthcare providers to change the way in which the services are run. In our unit at UHP we recognised that in order to continue to provide an efficient and safe service we would have to make adaptations that met the demands of our caseload. We have learnt that last year 369 symptomatic cancers were diagnosed. This averages as 7.2 cases per week. Through evidence based clinical planning, we have concluded that as predicted two operation lists per week of 4 cases should be sufficient. This should allow us to operate on all the symptomatic cancers, provided screening is not suspended such that the interval cancers appear in the symptomatic clinics. It may become necessary to focus on a longer-term management plan.

References


Show devices the Yellow Card
Cleo Kenington, ASGBI London Regional Representative and Consultant Emergency General Surgery, St George’s Hospital, London

On a recent ASGBI regional reps meeting, it was highlighted that while we all knew about the Yellow Card monitoring system for drugs, there is a new component that many of us were unaware of, which was felt important to share with our members. The MHRA are keen to share information about how they are monitoring safety with the public and health professionals.

The Blue Button

The Yellow card reporting system has moved online since it’s origins as a removable card at the back for the British National Formulary. This allows patients to be encouraged to also submit suspected side effects. There are also more categories than just side effects to medicines. The site includes pages for reporting incidents involving a medical device including diagnostic tests, softward and apps (the Blue Button). There is also a page for fake medicines, and safety concerns for an e-cigarette.

The term ‘medical device’ covers a broad range of products that are used in healthcare. They can be physical items or software which are used for the diagnosis, prevention, monitoring or treatment of illness or disability. Products reportable to the Yellow Card scheme as a medical devices will have a CE mark. Examples of medical devices include: heart valves and hospital beds; surgical instruments and syringes; wheelchairs and walking frames. An adverse incident is an event that caused, or almost caused, an injury to a patient or other person, or a wrong or delayed diagnosis and treatment of a patient.

Examples of problems:
- a faulty batch of test strips for a blood glucose meter giving wrong readings
- labelling or instructions on the device are not clear

Yellow Card App

There is then an app, which can update you on safety updates, although unfortunately the app doesn’t seem to cover the devices section yet, just the medicines.

Please ensure that any adverse incidents with devices used in theatres are reported, so that the MHRA can support us to improve the safety of the wide range of devices used.

Medicolegal Aspects of Surgical Practice Webinar
Gary Spence, Northern Ireland Representative and Consultant

Having assumed the role as the Northern Ireland ASGBI Rep in January, I wanted to try to encourage better engagement between the Northern Irish general surgical body and ASGBI. I came to the conclusion that in the setting of the current COVID-19 pandemic, one method of attracting the attention of busy colleagues, might be to organise an educational webinar on a relevant topic of interest to practicing surgeons, regardless of their sub-specialty.

As such, ASGBI kindly hosted the above webinar, open to all Northern Ireland general surgeons, on 19 November 2020. We were able to secure a number of experts in their respective fields who generously gave of their time, knowledge and expertise to educate us on a range of Medicolegal Issues and how they might impact on a general surgeon.

37 delegates connected virtually to hear a number of informative presentations on a wide range of Medicolegal topics. Judge Philip Gilpin, County Court Judge reviewed the areas where a surgeon might come in to contact with the legal profession and encouraged us to try to view our encounters with the law as a chance to emphasise good practice, rather than to view our encounters negatively. Mr Jeffrey Campbell, recently retired general surgeon and past NI ASGBI Rep, gave an open and honest discourse focusing on litigation and expert witness work; as well as taking us through what principles are used to determine burden of proof with regard to duty of care and consent.

Following the 4 presentations, a lively panel discussion ensued, with the panel debating questions that the delegates submitted during the webinar, before ASGBI Vice President Neil Welch brought the meeting to a close.

Feedback from delegates has been unanimously positive and I am grateful to Neil and the 4 presenters for giving of their time and expertise.

If you would like to view the recording of the webinar, it can be accessed via the following link here.

ASGBI’s Medicolegal lead, Professor Gordon Carlson gave the final presentation of the night, focusing on litigation and expert witness work, while Mr Campbell, focused on the legal profession and encouraged us to try to view our encounters with the law as a chance to emphasise good practice, rather than to view our encounters negatively.

Mr Campbell, recently retired general surgeon and past NI ASGBI Rep, gave an open and honest discourse focusing on litigation and expert witness work; as well as taking us through what principles are used to determine burden of proof with regard to duty of care and consent.

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If you would like to view the recording of the webinar, it can be accessed via the following link [here](https://example.com).
East Midlands Journal Club
Neil Welch
Vice President, ASGBI

Last month’s ASGBI East Midlands Journal Club discussed the paper of the month from the Royal College of Surgeons’ Updates from the journal of Surgical Endoscopy entitled the Use of Minimally Invasive Surgery in Emergency General Surgical Procedures.

This was a most successful session that opens new efficient and constructive avenues for the use of social media. In this article you can get a taste of the great work that was done and get inspired for organising your own educational surgical session over social media!

The opening tweet with the presentation had 265 engagements

Consultants and trainees from across the East Midlands and beyond showed support and joined in the discussion.

The applicability of NELA for MIS cases was questioned and duly answered by Hannah NELA research fellow.

There were interesting contributions from friends outside the region demonstrating the power of an online format.

The next ASGBIEastMidsJC will be presented on Tuesday 26 January at 7pm by Mr Gael Nana, Registrar at Queens Medical Centre, Nottingham. He will be presenting the paper:


Please follow the twitter handle @ASGBIEastMidsJC for the presentation and use the hashtag #ASGBIEastMidsJC for all discussion.
President's Choice
Photos by Professor Iain Anderson
ASGBI President 2019 - 2020

As this is Iain's last issue in his role as ASGBI President, we have included some of his photographs.

Glen Rosa in Winter
Firth of Clyde
The Holy Isle
Surgical Life: The Journal of the Association of Surgeons of Great Britain and Ireland, Number 58

THE SURGICAL TRIAGE UNIT AT SALFORD ROYAL NHS FOUNDATION TRUST

Lesley Ann McAlpine, Advanced Emergency General Surgery Practitioner and Rae Brindle, Consultant Endocrine and Colorectal Surgeon.

Email: lesley.mcalpine@srf.nhs.uk

Salford Royal Foundation Trust is a 676 bedded teaching hospital and tertiary referral centre. It is currently listed in the top 100 hospitals in the world and was recently recognised as having consistently lower than average NELA mortality rates for the second year running. Salford Royal has a catchment area of 230,000, with around 4000 non elective surgical admissions per year, including complex cases from surrounding units.

The Surgical Triage Unit (STU) and associated ‘Hot Clinic’ were opened in 2016. The intention, to reduce non-elective admissions, reduce length of stay and improve patient experience across three specialties of Gynaecology, Urology and General Surgery with a new ethos of ‘assess to admit’ not ‘admit to assess’.

The STU began with 12 beds, accepting referrals via the Emergency Department (ED) and General Practitioner (GP) referrals attending the unit directly; as well as providing ambulatory care via daily hot clinics run by the on call team.

There are around 400 admissions per month, with an average length of stay prior to the STU opening, of 3.8 days. While referral rates remained steady after STU opened, the proportion of patients discharged in less than 12 hours increased by 40% and average length of stay reduced to 2.9 days. These changes have been maintained over last the 4 years with an estimated 24,000 bed days saved in that time.

Team Development

In its inception, the team comprised consultant clinical lead, ward manager, a health care assistant and one staff nurse. However, this quickly changed, as the unit developed; staff wanted to come and work there permanently. As a result staff turnover is low and morale is high. It is a friendly tight knit unit which thrives upon team-working in achieving its goals.

The past four years has seen the STU expand to provide 16 beds, and flourish into an integral area of the hospital. This has been achieved by forward thinking leadership in developing the workforce and services provided.

The permanent team involved in the running of the unit now consists of a Consultant General Surgeon Clinical Lead, who has overall responsibility for the unit along with the Matron, and clinical leads from urology and gynaecology. In 2017 a STU based junior clinical fellow role was created, which has become a sought after post, due to its interesting clinical exposure and supportive team environment.

A team of 4 qualified Advanced Clinical Practitioners (ACP)’s has been assembled, drawing upon a diversity of nursing backgrounds; Theatre, HDU, Pain Services and Ward Management. Collectively, they provide a strong, dynamic non–medical team addition; working across ward rounds/ED referrals/STU/theatres and hot clinics, whilst successfully utilising links with their former departments to support the smooth running of the service.

In 2020, a consultant surgeon was appointed in the ambulatory care area, working 3 days per week giving valuable senior input to the hot clinic service. Two further general surgeons provide one session a week each as a job planned activity.

The nursing team worked very hard to achieve the prized status of being recognised as a ‘SCAPE’ unit, (Safe, Clean and Personal Care, Every time), with promotion of the ward manager to Matron. Another crucial appointment in this time was the STU administrative coordinator, who has been instrumental in formalising processes for the safe management of results, follow up, and daily logistics for the smooth running of the unit. We have 2 highly efficient ward clerks and our housekeeper and domestic staff, run a tight ship. Our clinical support workers are trained to a high level, performing canulation bloods and ECG. ‘Friends and Family’ feedback consistently reports on the compassionate care provided within a busy environment.

The whole team actively contribute to service development, research and audit, as well as teaching. Our ACP team teach junior doctors on basic surgical skills, consent and theatre etiquette, whilst our registrars provide a mentorship scheme with the ACPs for their continued professional development.

How it Works

The STU is the hub of the General Surgery Emergency Service. As well as the 16 bedded inpatient unit, ambulatory activity is run from assessment rooms and a chaired seating area which was until this year; based within the footprint of the STU itself.

Ambulatory/Same Day Emergency Care is provided 7 days a week by the on call team and permanent staff. It is coordinated through an intranet based booking site, with 7 bookable hot clinical slots per day, and a full range of ambulatory imaging slots for ultrasound, CT, and MRCP. An ambulatory abscess pathway and expedited acute gallbladder pathway also help reduce unnecessary admissions.

There is a 1:13 consultant on call rota, provided by General/Colorectal Surgery. The daytime on call consultant of the week (Mon-Thurs/ 8am-10pm, Fri-Sun 8am-8pm) is supported by a Registrar, middle grade, FY1 and at least 1 ACP.

An additional CEPOD theatre Registrar covers 8am-8pm and a SHO until 5pm Mon-Fri, supervised until midday (Mon-Fri) by the night consultant on call, then by the on call consultant of the day.
Challenges and Developments

In addition to the existing challenges of a busy service, 2020 has brought its own huge challenges. Adapting our activities to social distancing requirements has meant moving all ambulatory activity to a nearby location. Conversely, this has also allowed us to make some improvements too, such as a dedicated daily Ultrasound list based in this area.

Ultimately, we look forward to the completion in 2023 of a new multi million pound acute receiving centre, for the provision of ‘Healthier Together’. This initiative will centralise high risk emergency surgery and trauma to a single site. It will also include a purpose built STU. This will provide additional assessment and minor procedure facilities for ambulatory patients, better handover and educational areas as well as staff break areas.

Weekend staffing levels currently remain lower than weekdays. Eventually, we hope to address this by increasing ACP numbers to allow 7 day coverage, and providing a CEPOD theatre registrar shift at weekends.

These challenges and all other aspects of STU management are reviewed on a monthly basis in our multi-professional business meeting. A recently created live dashboard facilitates review of all STU activity levels; allowing us to adapt to changes in workload, but also demonstrate success. The ability of the whole team to adapt and thrive in the face of this year’s incredible challenges has been testament to the strong base that has been developed over the years; along with a firm belief in the benefits brought to patients by efficient pathways of care and prompt access to a dedicated team.

Our team photo shows the latest staff initiative led by our ACP team to raise money for Christmas presents for inpatients; this year by a ‘Charity Christmas Sock Day’ a good example of the motivated and inspirational group of professionals on the STU.

The team spirit which has been created through hard work, regular meetings, and involvement of all members of the team in development of the unit, has been wonderful to see over the last 4 years, contributing to making EGS a more popular, more sustainable and overall better patient and staff experience.

Below is a selection of quotes from the Team

‘Absolutely great place to work with a wide ranging team of people team’

David L, Surgical Registrar

‘Such an amazing group of people to work with’

Lynn Jones, STU Administrator

‘I’ve proudly watched the staff develop and thrive over the past four years. The team-working and camaraderie is a joy to be a part of’

Kathleen Ryan, Ward Matron

‘There is a strong team work ethos on STU. This is demonstrated through the positive attitude and actions of all the staff. It is a privilege to work in an area that has patient care at the centre of its values’.

Cerys Walker, Advanced Practitioner

To view the Event website click here: 
https://www.superconnectseries.com/virtual-medtech-summit/

To Register click here
Emergency General Surgery Update
Miss Gill Tierney
Director of Emergency General Surgery ASGBI

ASGBI Emergency General Surgery Symposium 2020
The ASGBI Emergency General Surgery Symposium 2020 was held virtually on 9th September. We were delighted to have almost 300 participants, significantly more than we’d have been able to accommodate in Oxford. Those who attended have access to the platform for 6 six months, so there is still time to go back and watch presentations.

Thanks to all the expert speakers who participated and presented state of the art snapshots of the management of the acute surgical conditions which present to the general surgical emergency service.

As this was our first virtual conference we were pleased to see that attendees enjoyed the virtual experience and were happy with the platform.

In addition to the live sessions, we had some pre-recorded material on a range of topics.

Here’s what those who attended said:

‘Well done. I really enjoyed the programme and learned a lot.’
‘Well done. I wasn’t sure a virtual conference was going to be enjoyable but I had a good day.’
‘All presentations were practical and both helpful and thought provoking for all; Well done for topic selection.’
‘Convenient for people from remote areas as this doesn’t require travel and it is easier to stick to time. The down side is there is not much interaction.’
‘All excellent. Really enjoyed the ideas discussed in President’s corner.’
‘Format was surprisingly good. I tuned in for the whole thing and didn’t get bored. Short presentations of 10 min length works well.’
‘Enjoyed the honesty of Sarah Liptrot’s presentation- refreshing attitude and advice for early consultant career.’
‘All presentations were practical and both helpful and thought provoking for all; Well done for topic selection.’

Thanks to all the expert speakers who participated and presented state of the art snapshots of the management of the acute surgical conditions which present to the general surgical emergency service.

For those who haven’t attended, these have been one hour panel based sessions with a strong focus on discussion.

An exciting program is planned for 2021 - watch twitter and the website for details.

The ASGBI and NELA have strong links and we are proud to announce that my successor as EGS Director is the Surgical Director of NELA Miss Sonia Lockwood.

EGS Webinar Series
2020 gave us the opportunity to deliver a very well-received series of EGS educational webinars on topics including the following.

For those who haven’t attended, these have been one hour panel based sessions with a strong focus on discussion.

An exciting program is planned for 2021 - watch twitter and the website for details.

The ASGBI and NELA have strong links and we are proud to announce that my successor as EGS Director is the Surgical Director of NELA Miss Sonia Lockwood.

Miss Sonia Lockwood
ASGBI is committed to developing excellence in emergency general surgery through evidence-based sharing of good practice. Through its Director of Emergency Surgery (Miss Gill Tierney) and the Emergency General Surgery Board (Chaired by Professor Pete Sagar), ASGBI works with all four surgical Colleges, trainee representatives and specialty associations to improve matters in this area.

ASGBI and EGS
The Association:
- Produces guidelines and standards on EGS services in conjunction with ACPGBI, AUGIS, ALSGBI and NFAS
- Works closely with NELA (National Emergency Laparotomy Audit) to produce reports, drive change and share best practice.
- Liaises with the SAC;
- Shares best practice in ambulatory EGS tariff implications

If you would like to be part of the evidence-based development of excellence in UK Emergency Surgery why not join ASGBI, attend the annual emergency surgery one day meeting, our annual surgical congress and share with and learn from like-minded colleagues.

www.asgbi.org.uk
“I do look like a surgeon, because I am one”
Aimee Wilkinson1, Natasha Alford1, Maria Irene Bellini2

1 Bristol Medical School, University of Bristol, UK
2 Azienda Ospedaliera San Camillo Forlanini, Rome, Italy

This issue of female representation within surgery forms part of a wider discussion around societal expectations of women and, in particular, if it is possible for them to “have it all” when balancing work with family life. Nearly eighty years after Eleanor Davies-Colley became the first female fellow of the Royal College of Surgeons1, it is both surprising and saddening that this question is still at the centre of representation discussions.

Culturally, there are, of course, expectations and attitudes towards women that can be detrimental to a woman’s confidence or achievement. In spite of these, many female surgeons have excelled in their careers such that there are now more inspiring female surgical role models than ever before. For example, Carline Hing is a consultant orthopaedic surgeon, who was highlighted as part of the Royal College of Surgeons’ 2018 International Women’s Day celebration and defies stereotypes through prominent social media campaigns such as the #ILookLikeASurgeon or #HowI Became A Woman In Surgery hashtags and the Facebook groups, as the one from the ASGBI3, that bring women in surgery together to celebrate achievements and share opportunities (Figure 1).

Representation of women in surgery is undoubtedly improving; not least because the proportion of female surgical consultants has increased from 3 to 12% between the years 1991 and 20184. A cultural shift is also occurring. Female surgeons are fighting back against stereotypes through prominent social media campaigns such as the #ILookLikeASurgeon or #HowI Became A Woman In Surgery Twitter hashtags and the Facebook groups, as the one from the ASGBI4, that bring women in surgery together to celebrate achievements and share opportunities (Figure 1).

However, statistics still suggest an under-representation of women within surgery. In a recent survey, 88% of female surgical trainees were found to perceive surgery as a male-dominated field, and a further 59% had experienced discrimination in the workplace5. These findings are compounded by a chronic and on-going under-representation of BAME surgeons in leadership positions6, highlighting the desperate need for an intersectional approach to representation.

Issues of surgical culture also have implications for the next generation of aspiring surgeons.

Female medical students, unlike their white male colleagues, are often subjected to differential treatment, which can often include incessant inquisition about their plans to have children. As a result, it is not uncommon for female medical students to feel that they must adopt stereotypically masculine characteristics in order to be taken as seriously as their male peers or that they must give up on a surgical career altogether. The message to female, BAME, LGBT+ and other marginalised groups of medical students is often clear – surgeons do not look like you.

In an effort to target, early on, the stereotypes and assumptions that surround who can become a surgeon, we have set up the first ever Womxn in Surgery Society at Bristol medical school. We believe that if female students are able to identify characteristics in common with successful female surgeons, then they are more likely to believe there is a place for them in surgery. Put simply, “you cannot be, what you cannot see”7.

We aim to achieve this, in part, through our interview series entitled “22 Questions With”. The inspiration for this series lies in equal measure with Vogue’s “72 Questions”, which interviews prominent celebrities in a way that humanises their experiences, and a survey of surgical trainees published by Bellini et al. from the ASGBI Women in Surgery working group8, which found that 22% of respondents perceived a “glass ceiling” in surgical training. During our interviews, we ask female surgeons of all grades a standardised set of 22 questions that are designed to evoke learning points from their lived experience and to normalise female achievement and ambition. At the heart of each episode is the desire to increase visibility of role models for every student.

Though the interview series is in its infancy, it has already provided us and our viewers a greater appreciation for the diversity that exists amongst surgeons. It is clear that there is neither a single, ideal route into a surgical career, nor is there a gender, skin colour or other characteristic that defines what a surgeon looks like. In the words of Miss Shelley Potter, a consultant oncoplastic breast surgeon from Bristol, who said in a recent interview – “I do look like a surgeon, because I am one.”

Bristol WinS are always looking for new surgeons to interview as part of the “22 Questions With” series. If you would like to volunteer to be part of the series or recommend an inspiring surgeon, please get in contact.

Find us on Twitter, Instagram and Facebook @BristolWinS (Figure 2)

View our most recent episode of “22 Question With” - https://www.youtube.com/watch?v=9EORTSjrLn4&ab_channel=BristolWinS

Figure 1: The ASGBI campaign “How I Became a Woman In Surgery”

Figure 2: The Bristol WinS twitter account
References


2. Curriculum vitae: Samantha Tross BMJ 2017; 359: j4576 Available at: https://www.bmj.com/content/359/bmj.j4576

3. Moberly T. A fifth of surgeons in England are female. BMJ 2018; 363: k4530 Available at: https://www.bmj.com/content/363/bmj.k4530

4. ASGBI Women in Surgery Facebook group: https://www.facebook.com/groups/1607275052681036/


CORESS Feedback - Cases from the Confidential Reporting System for Surgery
Professor Frank CT Smith, Programme Director on behalf of the CORESS Advisory Board

CORESS is an independent charity, supported by the Federation of Surgical Specialty Associations (FSSA)
Following a series of drug errors described in the last CORESS Feedback, a further case illustrates the frequency with which these potential adverse events occur. Venous thromboembolism affects all areas of surgery and two cases here draw attention to consideration of the diagnosis, and risks for developing VTE. The need to assess placement of central lines is illustrated by 2 further cases, as are risks to the ureter in pelvic surgery.

We are grateful to those who have provided the material for these reports. The online reporting form is on the website (www.coress.org.uk), which also includes all previous Feedback reports. Published cases will be acknowledged by a Certificate of Contribution, which may be included in the contributor’s record of continuing professional development, or may form part of appraisal or annual review of competence progression portfolio documentation. Trainee contributions are particularly welcome.

Professor Frank CT Smith
On behalf of the CORESS Advisory Board

Missed pulmonary embolism (Case ref: 272)
A 45-year old lady presented to her GP with a tender swollen calf following her return from a skiing holiday, during which she had had a nasty fall. She had also developed a cough and was referred to the ED department of the local hospital for a chest x-ray.
When she attended hospital, she was sent for an x-ray which demonstrated some shadowing. The attending doctor failed to pick up on the reason the patient had initially attended her GP, her calf injury, but noted a family history of lung carcinoma and arranged an outpatient CT scan which was booked for the next week.
In the interim the patient developed shortness of breath and haemoptysis 2 days after being seen in the ED and reattended, at which time the CT scan was undertaken urgently. This confirmed the presence of a large pulmonary embolus and D-dimers were positive.
The patient underwent thrombolysis and was anticoagulated. The Trust settled out of court for the missed deep vein thrombosis and PE.

CORESS comments:
The main lesson in this case is the need to take a full history. In the presence of a swollen calf and cough, the diagnosis of DVT, possibly in association with a PE, should have been considered. Early lower limb venous duplex and measurement of D-dimers would have been helpful and would probably have directed clinicians to request an urgent CT pulmonary angiogram.

Gastrectomy kit miscommunication (Case Ref: 273)
This was the first day on which elective surgery was resumed following the Christmas break. A total gastrectomy was scheduled. The theatre list was prepared and checked on the morning of surgery. The surgeon intended to use a powered stapling device for the anastomosis. This had been a recent change to the surgeon’s practice which was assumed to be common knowledge amongst theatre staff.
The team brief was completed. Equipment was identified but there was no specific mention of using a powered circular stapler rather than a standard stapler. A new member of staff scrubbed for the case and was not able to review the surgeon preference book (which was later retrieved from another theatre). The Surgical Clinical Practitioner confirmed that all stapling devices were available but didn’t specifically mention powered stapling devices. Once the resection was performed, the circular stapler anvil was requested and gun size (25mm) checked with the consultant. Unbeknownst, the anvil for the non-powered gun was secured in place with a purse string. No mention was made of the powered stapler, therefore a non-powered version of the staple gun was handed over. When this was given to the surgeon, it was realised that this was in fact the non-powered gun, and the non-powered anvil was now sutured in-situ.

With this deviation from plan, the consultant considered the available options. The only way of switching from non-powered to powered device would have been to remove the already secured anvil of the conventional stapler, replace with the anvil of the powered gun, and resuture - a process which, in a high-risk case, was not advisable unless absolutely necessary. The clinical practitioner de-scrubbed to locate a powered staple device and to contact the company representative for the device, for troubleshooting advice (He was non-contactable). The surgeon decided to proceed with the non-powered stapling device. The anastomosis was completed safely without further incident, the staple line checked and confirmed to be intact.

A thorough team debrief was completed which identified that no one person was responsible for the error and that this was caused by communication failures at multiple points during the case.

CORESS & Reporter’s comments:
A variety of factors contributed to the operative confusion. This was the first day back at work after a prolonged holiday break for theatre staff, who may not have been fully up to speed with what was required for the case. At the brief, no-one (including the consultant), specified the need for the powered staple gun. The theatre team were not used to using the powered stapling device as standard practice. Previous cases had been overseen by a company representative who was not present, and who could not be contacted on this occasion.

This was a classic case of the ‘Swiss cheese’ effect resulting in an adverse incident, compounded by poor communication. The consultant should have checked that the theatre team were aware of the required kit and had this available, and he, or she, should have checked this prior to commencing surgery.

Figure 1. CT pulmonary angiogram with left pulmonary artery embolism illustrated

Figure 1.
Leaking gastrostomy

A 58-year-old female, with a right pyriform fossa squamous cell carcinoma treated with radiotherapy, was listed for a laparoscopic gastrostomy due to weight loss and difficulty in swallowing.

At surgery, 21 of ascitic fluid was drained. A small gastrostomy was created on the anterior gastric wall using a diathermy hook via an incision in the epigastric area. The gastrostomy tube was passed via the abdominal incision through the gastrostomy into the stomach, having checked balloon function. The tube was assessed to ensure it was in the gastric lumen. The balloon was then inflated using 5 ml sterile water and pulled back gently to the abdominal wall. 20 ml of normal saline was infused through the tube to ensure no leakage. The peritoneal cavity was deflated, and the gastrostomy tube secured to abdominal wall using 2/0 silk. The laparoscopic umbilical defect was closed with Prolene®. Because of inexperience in laparoscopic suturing, the surgeon did not perform a purse string around the gastrotomy incision, or suture the stomach to the abdominal wall.

Feeding was started 48 hours post insertion, and the dietitian recorded: “Feed now running with no problems. Patient feels a little bloated but otherwise comfortable”. She was discharged on the same day with arrangements for home nutrition.

The patient was readmitted after 4 days with generalized abdominal pain, raised CRP and normal WCC. An urgent CT scan recorded “New large gas-air fluid level in the abdomen. Majority of PEG tube located within the subcutaneous tissue, with the tip outside the stomach lumen.” A CTPA showed left-sided pulmonary artery segmental branch acute embolism.

The patient underwent emergency laparotomy at which the findings were of enteral feeding fluid in the abdomen. Majority of PEG tube located within the subcutaneous tissue, with the tip outside the stomach lumen.” A CT showed left-sided pulmonary artery segmental branch acute embolism.

The patient was admitted to the ITU but developed multorgan failure and succumbed 21 days after the salvage laparotomy.

CORESS & Reporter’s Comments:
Since description of the open Stamm gastrostomy, variations of the procedure using a balloon catheter, involve securing the catheter by purse string suture and/or fixation of the stomach to abdominal wall, to prevent dislodgement of the tube from the stomach.

With abdominal wall distention in the presence of ascites, there may be increased tension on the gastrostomy tube, with higher risk of dislodgement. Laparoscopic surgery involves more than small incisions, and the skills required for delivery of safe surgery include the need for safe laparoscopic suturing skills. In some centres combined laparoscopic and endoscopic teamwork is employed for PEG placement.

Fatality pulmonary embolus after renal cancer surgery

A 65-year-old female had surgery for a large left renal tumour. The tumour was more advanced than anticipated and intra-operatively the decision was taken to undertake a multi-visceral resection: en-bloc nephrectomy, distal pancreatectomy, splenectomy and left hemicolectomy (with end colostomy). She recovered well from the surgery and the renal cancer was completely resected.

She underwent uneventful elective reversal of colostomy 18 months later and was discharged 7 days postoperatively. Seven days after discharge, she suddenly developed acute breathlessness and circulatory collapse, consistent with pulmonary embolism. Resuscitation and acute thrombolysis were unfortunately unsuccessful.

CORESS & Reporter’s Comments:
For the reversal of colostomy, thromboembolic prophylaxis had been provided as a routine, with calf-compression intra-operatively, VTE stockings and chemoprophylaxis while in-hospital. Extended chemoprophylaxis was not provided. Extended prophylaxis is offered at our institution in line with 2018 NICE guideline for patients undergoing surgery for cancer:
https://www.nice.org.uk/guidance/ng89/chapter/Recommendations

The Guidelines recommend:
• Provide anti-embolism stockings until the person no longer has significantly reduced mobility relative to their normal or anticipated mobility.
• Add pharmacological VTE prophylaxis for a minimum of 7 days for people undergoing abdominal surgery whose risk of VTE outweighs risk of bleeding, taking into account individual patient factors and according to clinical judgement.
• Consider extending pharmacological VTE prophylaxis to 28 days postoperatively for people who have had major cancer surgery in the abdomen.

Formulary changes contributing to near over-dosage

A neurosurgical patient in her 50s, with a history of Multiple Sclerosis was referred for a trial of intrathecal baclofen therapy. This involves placement of a lumbar spinal Intrathecal catheter and injection of a small test amount of baclofen followed by physiotherapy assessments.

The dosage of baclofen used is usually 50 micrograms, given as an intrathecal bolus. This dosage is dispensed by the pharmacy in a 1 ml ampoule. Units who offer intrathecal baclofen pump placement and maintenance also regularly refill the implanted baclofen pumps of their treated patient cohort. In this case, pharmacies dispense 20ml of baclofen solution at a strength of 500 micrograms per ml, to 3000 microgram concentration, as required by the dosage.

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It may be that extended prophylaxis would have reduced this patient’s likelihood of experiencing a fatal PE. We wish to flag this to the profession, so that surgeons undertaking major abdominal-pelvic surgery for ‘benign’ disease or malignancy should consider providing extended chemoprophylaxis.

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In the case described here, pharmacy dispensed a 10ml vial of Baclofen, at a concentration of 500micrograms/ml, instead of the conventional test dosage of a 1ml solution of 50micrograms used for trial purposes. Over-dosage, and potential baclofen toxicity, was narrowly averted when this dose (10 times the required concentration of baclofen), was identified at the final cross check before the trial injection was administered.

**Reporters Comments:**
The learning point from this near miss is the importance of cross checks. Additionally, pharmacies should warn clinicians of any changes in the dispensing formulary, particularly if these changes relate to long established practice.

**CORESS Comments:**
CORESS has previously described other medication errors. These can occur in:

- choosing a medicine—irrational, inappropriate, and ineffective prescribing, under-prescribing and over-prescribing;
- writing the prescription—prescription errors, including illegibility;
- manufacturing the formulation to be used—wrong strength, contaminants or adulterants, wrong or misleading packaging;
- dispensing the formulation—wrong drug, wrong formulation, wrong label;
- administering or taking the drug—wrong dose, wrong route, wrong frequency, wrong duration;
- monitoring therapy—failing to alter therapy when required, erroneous alteration.

Aronson1 has classified medication errors according to four broad categories:

- Knowledge-based errors (through lack of knowledge)
- Rule-based errors (using a bad rule or misapplying a good rule)
- Action-based errors (called slips)
- Memory-based errors (called lapses)

This case involved a change in stock formulary and dispensing. It remains the individual clinician’s responsibility to check each drug, ampoule and date, prior to injection.

1. Medication errors: what they are, how they happen, and how to avoid them. J.K. Aronson QJM: An International Journal of Medicine, 2009;102 (8) 513-521,
https://doi.org/10.1093/qjmed/hcp052

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**Ureteric injury 1** (Case Ref: 277)
A 51 year-old female with a long history of complex diverticular disease developed a chronic abscess in the pouch of Douglas. It was decided that a sigmoid colonic resection was the way forward, but that pre-operative placement of ureteric stents would help the surgeon identify the ureters.

Surgery was difficult due to very thick fibrotic reaction in the pelvis and a Hartmann’s procedure was performed using a high energy device. The inferior mesentric pedicle was not mobilised, and dissection took place in a plane close to the colon. A pelvic drain was placed, and the stents remained in situ. Recovery was complicated by an ileus and pelvic collection, noted on a day-7 CT scan.

External drainage of the collection was secured but the sepsis continued for a further two weeks and a further scan showed the size of the collection increasing. Electrolyte analysis of the drain fluid was consistent with urine. A cystogram was performed which demonstrated no bladder abnormality. Review of the radiology was undertaken and on this secondary review it was clear the left ureteric stent had been divided and was the source of the urine leak.

Urgent nephrostomy was undertaken, and the patient was able to go home with a view to re-implanting the ureter at a later date.

**Reporters Comments:**
Stents do not prevent ureteric damage but should allow easier identification of the structures at surgery, and hence preservation. Unfortunately, the damage was not noted intra-operatively, or post-operatively, on two separate scans. Use of the high energy dissection device reduces the tactile feedback associated with traditional dissection.

Retrospectively, hyperchloraemia was present on day 4 and could have alerted the team to a urinary leak at an earlier stage.

**CORESS Comments:**
Prophylactic ureteric stents potentially reduce rates, and facilitate intraoperative recognition, of iatrogenic ureteric injury (IUI) during colorectal resections. However, there is a lack of consensus concerning risks and benefits of this practice. The most frequent indications for prophylactic stents are diverticular disease, neoplasia and inflammatory bowel disease.

A systematic review has recently concluded that placement of prophylactic ureteric stents has a low complication rate 1. However, there is insufficient evidence to conclude that stents decrease ureteric injury or increase intraoperative detection of inadvertent ureteric injuries (IUI). Apparently higher rates of IUI in stented patients likely reflect use in higher risk resections. The use of lighted ureteric stents may facilitate recognition of the ureter in laparoscopic surgery.


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**Ureteric injury 2** (Case Ref: 278)
A 72 year-old man presented with a pulsatile abdominal swelling. A 6.8cm infrarenal aortoiliac aneurysm, with concomitant left and right iliac aneurysms measuring 5cm and 4.2 cm respectively, was demonstrated on CT angiography.

After anaesthetic assessment and CPET testing, the patient was listed for open aneurysm repair. Fully informed consent was undertaken, at which risk of ureteric injury was discussed and documented. Surgery was complicated by the inflammatory nature of the aneurysm and although the ureters were sought prior to implantation of an aorto-to-bilateral iliac bifurcations bypass, the surgeon documented in the operation note that the left ureter could not be found in the vicinity of inflamed left iliac aneurysm.
Postoperatively the patient made a satisfactory initial recovery with discharge at 5 days. At day 9-postoperatively however, he developed rigors and was readmitted to hospital where a CT scan confirmed a left pyonephrosis, and obstructed left ureter at the pelvic brim, requiring nephrostomy. Attempted stenting of the ureter was unsuccessful, and the urologists eventually undertook a diversion procedure. The patient took 3 months to recover.

Reporter's Comments
Medical litigation was instigated but was eventually abandoned on the advice of an expert witness who commented that the patient had received appropriate informed consent, warning of potential consequences of ureteric injury; that the injury was a recognised complication of iliac aneurysm repair; and that the surgeon had demonstrated awareness of the potential for injury, documenting inability to demonstrate the ureter in the operation note. Nonetheless, this was an unpleasant salutary experience for both patient and surgeon.

CORESS Comments
CORESS is aware of similar cases in which litigation has been successful and that adequate consent was not held to be a mitigating factor. The option of Endovascular Aneurysm Repair (EVAR) would have been considered in many vascular units, in this situation.

Line Problem 1 - PICC Line Misplacement (Case Ref: 279)
A 52 year-old man had a Peripherally Inserted Central Catheter (PICC) line inserted via the left cephalic vein for administration of long-term chemotherapy. Ultrasound guidance was used to aid peripheral line insertion, but no central imaging was undertaken.

Some hours after return to the ward, a chest x-ray was undertaken. This showed the tip of the PICC line to be curled up in the right atrium. The patient had not suffered from arrhythmia or other cardiac-related side-effects. The vascular registrar was called, who reviewed the x-ray and gently pulled the line back approximately 4 inches. A subsequent x-ray undertaken 2-3 hours later, confirmed that the tip of line was still located in the heart. By this time another vascular trainee was on duty and attended to pull the line back a further four inches. On this occasion, check X-ray confirmed that the tip of the line was finally located in the superior vena cava.

Reporter's & CORESS Comments
NICE has issued very specific guidelines on placement of PICC lines. Some commercially available systems use the patient’s cardiac electrical activity to track catheter tip location or employ magnetic navigation with external measurement to determine tip positioning. Otherwise, fluoroscopy or chest X-ray should be undertaken to ensure that the catheter tip lies in the superior vena cava prior to usage. In this case, no immediate imaging was undertaken to confirm correct siting of the catheter tip at initial placement, or during the subsequent two interventions to retrieve the inappropriately sited catheter from the patient’s heart.

Advisory Board members commented that PICC lines may be variable in length and the length should be determined prior to placement. Imaging is mandatory following placement. Many units have a dedicated PICC line placement team and line placement should follow standardised guidelines within a Unit.

Line problem 2 - CVP line causing haemothorax (Case Ref: 280)
A 69-year-old man was extubated in theatre and taken to the ICU at the end of the day, following complicated surgery to remove a large colonic tumour. For rehydration purposes, a 16 G central venous line was placed via an anterior approach to the right internal jugular vein, using a Seldinger technique, under ultrasound control. Free blood was obtained from the catheter on aspiration after placement in the superior vena cava.

Two hours later, the patient developed chest pain with a mild tachycardia, pulse rate of 95bpm and his blood pressure dropped to 105/70 mmHg. A chest X-ray was undertaken in which the tip of the catheter was visualised within the thorax. A small haemothorax was noted.

The patient was resuscitated with fluids, normalising blood pressure and pulse rate and the on-call vascular surgical registrar was called for advice. He suggested that the central venous catheter should be removed gently under aseptic technique. This was done by intensive care staff. Within an hour, the patient’s observations deteriorated again, and a further urgent chest X-ray confirmed a large haemothorax. The cardiac surgical team were called, and the patient was taken to theatre, where median sternotomy was undertaken, the haemothorax drained and a small tear in the superior vena cava oversewn.

The patient subsequently made a satisfactory but protracted recovery from surgery.

CORESS Comments:
After central venous access device (CVAD) insertion, a post-procedure check chest X-ray (CXR) should be reviewed by the individual who performed the procedure. The tip of a CVAD should be verified on chest X-ray prior to use and the exact location of the tip documented in the medical notes, unless a tip location device has been used to verify tip location (when a CXR not required). Once the patient had been diagnosed with a haemothorax, probably due to a misplaced catheter tip, removal should have been approached with caution. Placement of a guidewire, prior to catheter removal might have allowed an endovascular approach to treating the perforated vena cava.

A useful aide-memoire with regard to a misplaced central venous catheter, in the short-term, is: “if in doubt, don’t take it out.”2 Evaluation followed by removal of the catheter under vision after adequate exposure is advocated. This is in contrast with the situation of the misplaced endotracheal tube where the advice is: “if in doubt take it out.”

We would greatly appreciate your feedback to further enrich the content and format of the JASGBI!

Please complete the survey (link below) to tell us what you think

https://www.surveymonkey.co.uk/r/X26JQC7

Contributor Guidance

Aims
The Journal of the Association of Surgeons of Great Britain and Ireland (JASGBI) is a regular publication that has evolved from the previously named Newsletter. It aims to publish material of topical or general interest to members of the Association, which will promote and advance the reputation and functions of the Association to a wider professional audience.

JASGBI is not a peer reviewed, academic publication, and is not intended as a vehicle for conventional academic papers. We nevertheless welcome a wide range of subject matter which may include:

- Articles of national and strategic relevance in relation to surgical training, teaching, career development, and issues in national politics, as they bear upon surgical and professional practice.
- Articles of topical debate.
- News from the Regions, and from affiliated Specialty Associations and Societies.
- Articles on international surgical practice, as observed by members of the Association on their travels, attachments and secondments.
- Historical articles of interest and relevance to surgeons.
- Personal experiences, parallel careers, hobbies, activities and achievements which are out of the ordinary, or which would fit our popular 'Secret Lives' series.

This list is not exclusive. JASGBI is keen to encourage and help develop standards in professional writing and to act as a vehicle for new and original material.

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Material submitted to JASGBI should thus be original to the author(s). The editors reserve the right to submit any manuscript to peer review and to seek any amendments which are deemed to improve the presentation or content of the article to meet the standards and style of JASGBI.

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