Research in Context

We have accessed, using Pubmed and our professional networks, all publications related to use of aspirin as a cancer chemopreventive agent and we have reviewed all research studies addressing therapeutic and preventive interventions in hereditary colorectal cancer in general and Lynch syndrome in particular. There is extensive support for the assertion that regular aspirin use reduces the cancer burden from observational studies (Cusick et al, Lancet Oncology 2009;19:501-7) and the meta-analysis of follow-up registry data derived from participants in RCT’s of aspirin as a means of preventing occlusive vascular disease (Rothwell et al, Lancet 2011;377(9759):31-41). RCT’s based on prevention of colorectal adenomas as a biomarker of cancer showed a mixed effect but meta-analysis revealed a smaller but significant benefit (Cole et al, JNCI 2009;101(4):256-66).

Interpretation

CAPP2 is the first RCT of aspirin as a chemopreventive agent with cancer as the primary endpoint. In the context of the published literature, the trial provides clear evidence that aspirin is a highly effective chemopreventive agent in hereditary cancer with an impact equivalent to that achieved using surveillance colonoscopy. The case for prescription of aspirin to this high risk group is clear. The mechanism of this delayed action and consequently, the optimal dose and duration of treatment remain to be established. A worldwide dose inferiority study is planned but will take several years since adenomas are not a reliable biomarker of effect. In the meantime, clinicians should consider aspirin prescription in all high risk clients, preferably after H pylori eradication if needed, and should remain alert to the potential need for proton pump inhibitors to help control adverse effects. It is likely that low dose aspirin will have at least some effect and its use would not compromise future involvement in the blinded comparison of low dose with the 600mg dose trialled in CAPP2.