MÆDICA - a Journal of Clinical Medicine

JOURNAL CLUB

Can we Trust Aspirin for Colorectal Cancer Prevention?

Ileana CORLAN, MD
Emergency University Hospital, Bucharest, Romania

In the effort of finding solutions for decreasing the incidence of colorectal cancer two main directions are currently studied: screening (for detection and surgical removal of colorectal adenomatous polyps) and prevention (by a variety of lifestyle and dietary changes and chemoprophylaxis).

A review based on an extensive search of the literature in MEDLINE, preMEDLINE, EMBASE, CENTRAL and the Cochrane library was done in 2007 for the U.S. Preventive Services Task Force on the effectiveness of aspirin for chemoprevention of colorectal adenomas, colorectal cancer and colorectal cancer mortality. From the 364 reports retrieved for relevance assessment (after excluding those with no relevant population, no relevant intervention, no relevant outcome, not an eligible study design and unable to obtain), the authors analyzed 8 case-control studies, 7 cohort studies and 2 randomized, controlled trials on the aspirin chemoprophylaxis of colorectal cancer and 7 case-control studies, 4 cohort studies and 3 randomized controlled trails on aspirin chemoprophylaxis of colorectal adenoma along with 12 systematic reviews on the harms of aspirin.

The regular use of aspirin appears to reduce the incidence of colorectal adenoma with RR reductions of 13% to 28% in average risk individuals, with greater reduction for longer duration (>10 years) and higher doses (>325 mg/day), and the relative risk of colorectal cancer with 22%; there was no benefit of low dose aspirin every other day in 2 randomized controlled trials addressing the effect of aspirin on the incidence of colorectal cancer. The effect of aspirin on colorectal cancer mortality is controversial, with one positive cohort study and one negative randomized controlled trial.

Meanwhile, the use of aspirin is associated with an increase incidence of important ulcer complications, with RRs of 1.5-3.0, with an absolute risk for gastro-intestinal bleeding of 2.69% per year for doses greater than 200 mg/day and an increased risk of hemorrhagic stroke.

Considering the fact that regular use of aspirin in patients at average cardiovascular risk does not reduce all-cause mortality, recommending aspirin for colorectal cancer prevention needs further investigation.

Comment on the paper:
Dube C, Rostom A, Lewin G, et al. – The Use of Aspirin for primary prevention of colorectal cancer: A systematic Review prepared for the U.S. Preventive Task Force. *Annals of Internal Medicine* 2007; 146:365-375