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Should Mesalamine Be Stopped Prior to Noncardiac Surgery to Avoid Bleeding Complications?

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Case Presentation: A 53-year-old Caucasian male with a past medical history of Crohn's disease, hypertension, hypercholesterolemia, osteoarthritis, and atrial fibrillation takes mesalamine (Asacol) to control diarrhea. His other medications include atenolol, warfarin, and simvastatin. He also takes oxycodone and acetaminophen as needed for hip pain. The physical examination is normal apart from irregularly irregular cardiac rhythm. The electrocardiogram shows atrial fibrillation with heart rate of 67 beats per minute. His exercise tolerance corresponds to 6 METs.

The patient is seen by an internal medicine physician for preoperative evaluation 1 week prior to surgery for total knee replacement for osteoarthritis of the left hip.

The patient inquires whether he should stop mesalamine to avoid bleeding complications during surgery. His primary care physician told him that non-steroidal anti-inflammatory drugs (NSAIDs) may increase the bleeding risk.

Discussion: Mesalamine (5-aminosalicylic acid) does not interfere with platelet aggregation as aspirin and other NSAIDs do. According to Winther et al,¹ there was no effect on platelet aggregation during normal treatment with 5-aminosalicylic acid when given at a dose of 1.5 g per day with a slow-release formulation, nor after an intravenous dose of 250 mg. All in vivo and in vitro tests were negative for inhibition of platelet aggregation, in contrast to the inhibition seen with aspirin (acetylsalicylic acid). Treatment with mesalamine does not constitute a hazard to patients with inflammatory bowel disease in regard to prolonged bleeding time caused by an influence on platelet aggregation or fibrinolytic activity.

1. Winther K, Bondesen S, Hansen SH, Hvidberg EF. Lack of effect of 5-aminosalicylic acid on platelet aggregation and fibrinolytic activity in vivo and in vitro. *Eur J Clin Pharmacol* 1987; 33:419-422.