NSAID-induced enteropathy in GI bleeding

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Non steroidal anti-inflammatory drugs (NSAIDs) are one of the most commonly prescribed drugs in the world for their efficacy as anti-inflammatory, analgesic and antipyretic agents. Over 30 million people worldwide take NSAIDs daily. However, NSAID use is limited by their associated gastrointestinal toxicity. These drugs can cause serious injury to any part of the GI tract, including life-threatening complications such as bleeding or perforation. The worldwide prevalence of NSAID-associated gastric and duodenal ulcers is 9% to 22%, with severe hemorrhage or perforation occurring in less than 1% of patients annually. And NSAID-induced enteropathy problem is also emerging recently. NSAID-induced lower gastrointestinal complications (perforation, bleeding or obstructions) are increasing while upper gastrointestinal complications are decreasing. NSAID-induced small intestinal injury had been under-examined or even ignored in clinical situations prior to the availability of capsule endoscopy. Lower gastrointestinal events accounted for 40% of all serious gastrointestinal events in patients on NSAIDs. At present, capsule endoscopy and double balloon endoscopy are available for direct detection of small intestinal lesions. The serious problem of NSAID-induced small intestinal injury has recently become a topic of great interest to gastroenterologists, as capsule endoscopy and double-balloon endoscopy are available for detecting small intestinal lesions. Capsule endoscopy studies have demonstrated that NSAIDs use in healthy volunteers raised the incidence (55-75%) of intestinal damage. There are currently no therapies specifically designed or approved for the prevention of NSAID-induced enteropathy. It appears that selective cyclooxygenase-2 (COX-2) inhibitors improved upper and lower gastrointestinal safety based on results of clinical trials, but selective COX-2 inhibitors (coxibs) are still capable of triggering significant gastrointestinal adverse events and are still concerned to be associated with cardiovascular toxicity issues. The efficacy of PPI and H2RA might be still controversial. There is growing evidence that they worsen NSAID-induced enteropathy by altering the intestinal microbiota. COX–2 inhibitors, PG derivatives, cytoprotective drugs, novel NSAIDs, probiotics, and antibiotics have all been shown to have potential protective effects on NSAID-induced enteropathy.