

## A Case–Control Study on the Effect of Nonsteroidal Antiinflammatory Drugs in Upper Gastrointestinal Bleeding

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**Background/Aims:** To evaluate the association between nonsteroidal anti-inflammatory drugs (NSAIDs) use and upper gastrointestinal bleeding (UGIB), we performed a prospective case-control study at 6 University affiliated hospitals during 1 year period. The enrolled subjects were age and sex matched 168 pairs for bleeding case and control group. **Methods:** At the time of initial evaluation, all subjects were asked about the use of NSAIDs, past medical history, history of medications, and smoking. Case and control subjects were selected with endoscopic examination according to inclusion and exclusion criteria. The age and sex matched adjusted risk for UGIB with NSAIDs use was compared between case and control group.

**Results:** The matched odds ratios of UGIB with NSAIDs intakes adjusted for past medical history and history of medications with matching for age and sex was 7.2, for past medical history was 4.8, and for history of medication was 1.6, respectively. The numbers of subjects with NSAIDs intake according to the bleeding causes in both groups were not significantly different. *Helicobacter pylori* infection rates in the bleeding case and control group were 61.4% and 58.2%, respectively. There was no relationship between bleeding and concomitant medication such as steroid, antacid, H2 blocker, and misoprostol in both groups.

**Conclusion:** This prospective multicenter study suggests that NSAIDs intake is strongly associated with upper gastrointestinal bleeding.

**Key Words:** Nonsteroidal anti-inflammatory drugs; Upper gastrointestinal bleeding