Upper Gastrointestinal Bleeding in Patients in Chronic Hemodialysis

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Dear Sir,

Upper gastrointestinal bleeding (UGH) is a frequent complication of advanced renal disease and is the cause of death in 3-7% of patients with moderate to severe renal disease [1]. Duodenal ulcers have been proposed as the major cause of UGH in patients with chronic renal disease [2, 3] although recently angiodysplasia of the stomach and duodenum has been reported as the most frequent source of bleeding in this population [4, 5]. Most series have studied patients with different degrees of chronic renal disease and few have focused exclusively on patients in chronic hemodialysis.

We retrospectively reviewed (1980-1990) the inpatient records of 21 patients in chronic hemodialysis at our center who had an UGH and an upper gastrointestinal endoscopic procedure done during the first 24 h of the episode. All endoscopic procedures were done by one member of the gastroenterology section of the hospital (N.K.). An endoscopic lesion was thought to be responsible for the bleeding episode if the lesion was seen actively bleeding or had a fresh or adherent clot or if there was evidence of recent bleeding and the lesion seen was the only lesion that could explain the episode of bleeding. The patients were dialyzed regularly in 4-hour sessions 3 times/week using hollow-fiber dialyzers with acetate bath.

These 21 patients had 34 episodes of UGH. The mean age of the patients was 54.5 ± 2.9 years (range 28-83); 14 were male (66.6%) and 7 were female (33.3%). The mean time from the beginning of dialysis to the first episode of UGH was 34.2 ± 7.8 months (range 3-128). The predisposing factors for UGH were: a history of recent major physical stress (surgery, trauma or septicemia) in 6 patients, ulcerogenic medication in 5, bleed-

Table 1. Sources of UGH

Source

Patients

ing disorders in 3 (2 of them due to chronic liver disease), and 3 had a previous history of UGH from duodenal ulcers. Three other patients had endoscopic findings of scars of old ulcers. There was only 1 heavy smoker in the group, and none was a heavy alcohol consumer. Table 1 shows the sources of UGH. The most frequent source was erosive gastritis that was seen in 38% of the patients (8 cases): in 2 cases it was associated with a small ulcer in the first portion of the duodenum and in 2 cases with duodenitis. Duodenal ulcers came second in frequency (5 cases, 23.8%): in 2 cases associated with esophagitis and in 1 case each with a gastric ulcer and with gastritis. Acute duodenitis was seen in 3 cases (14.2%): it was pseudopolypous in 1 case and it was associated with erosive gastritis in 2 cases. Two patients had gastric ulcers as the source of bleeding and 2 patients had bleeding esophageal varices, both of them with chronic hepatitis B. Finally, 1 patient with severe vomiting had a Mallory-Weiss tear.

Eight patients had rebleeding episodes (38%): these were early (less than 30 days from the original episode) in 5 patients, and

late (more than 30 days) in 3 other patients. Multiple rebleeding episodes were seen in 3 patients. Three patients died: both patients with esophageal varices and 1 with a double gastric ulcer (3 days after the original bleeding episode).

This study corroborates the reported increased incidence of peptic lesions' [6,7] and the high frequency of recurrent hemorrhage in CRF patients in hemodialysis with UGH [4]. Gastric bleeding sites (erosive gastritis 38% and gastric ulcers 10%) were the most common source of bleeding immediately followed by duodenal ulcers.

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