Mesenteric Ischemia After Sumatriptan Use

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Citation

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Abstract

When surgeons evaluate patients with abdominal pain caused by ischemic colitis, they should be aware that the migraine medication sumatriptan has been associated with colon ischemia in a small number of patients.

Surgeons are often asked to evaluate patients with abdominal pain who are found to have ischemic colitis. Only rarely is the ischemia secondary to medication use. Medications implicated have included NSAIDs, cocaine and amphetamines. Sumatriptan is an anti-migraine medication which has recently been implicated as a possible cause of ischemic colitis also. In this article, an additional case of sumatriptan associated ischemic colitis is reported. We believe this is the first such case reported in a surgical journal.

CASE REPORT

A forty-one-year-old woman was admitted with an eighthour history of severe peri-umbilical and left-sided abdominal pain. She also had frequent bloody diarrhea and mild nausea. She had had a similar but milder episode several years earlier. Pertinent physical findings were confined to the abdomen where she had marked tenderness of the left mid-abdomen with voluntary guarding. The only lab abnormality was a mild leukocytosis. Abdominal CT scan showed marked thickening of the left colon. Flexible endoscopy confirmed the clinical suspicion that the patient had ischemic colitis. Mesenteric angiography was normal. When surgical consultation was obtained for this puzzling case, a second review of the patient's medication list disclosed that she had taken a dose of the anti-migraine medication sumatriptan about two or three hours before the onset of her abdominal pain. After our literature review showed that other patients had ischemic colitis shortly after use of sumatriptan, the patient was treated with supportive measures and recovered.

DISCUSSION

Sumatriptan succinate is a serotonin receptor agonist used in the treatment of migraine headaches. Knudsen₁ reported on eight cases of sumatriptan-associated ischemic colitis which were collected from a U.S. Food and Drug Administration database. Liu₂ added two additional patients. One of their patients required an operation for an episode of ischemic colitis. The same patient had three other episodes of abdominal pain associated with use of the drug. They also described mesenteric angiogram as normal in one patient and showing mesenteric arterial "string of beads" in a second patient. Naik₃ added an additional patient and described the CT findings of ischemic colitis after sumatriptan use. Repaka₄ reported a young woman with ischemic changes involving the small bowel after sumatriptan use.

We hope this report makes surgeons aware that the migraine medication sumatriptan is occasionally associated with the rather acute onset of mesenteric ischemia, usually involving the colon. Often the patient used only a single dose of the medication and onset of symptoms happens after only a few hours. Endoscopy with or without biopsy and abdominal CT scan usually establish the diagnosis of ischemic colitis. Patients often improve with supportive care. Only on rare occasion is operation necessary.

References

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