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Neostigmine-Induced Reversal of Faecal Impaction and Severe Constipation in a Young Patient with Systemic Sclerosis

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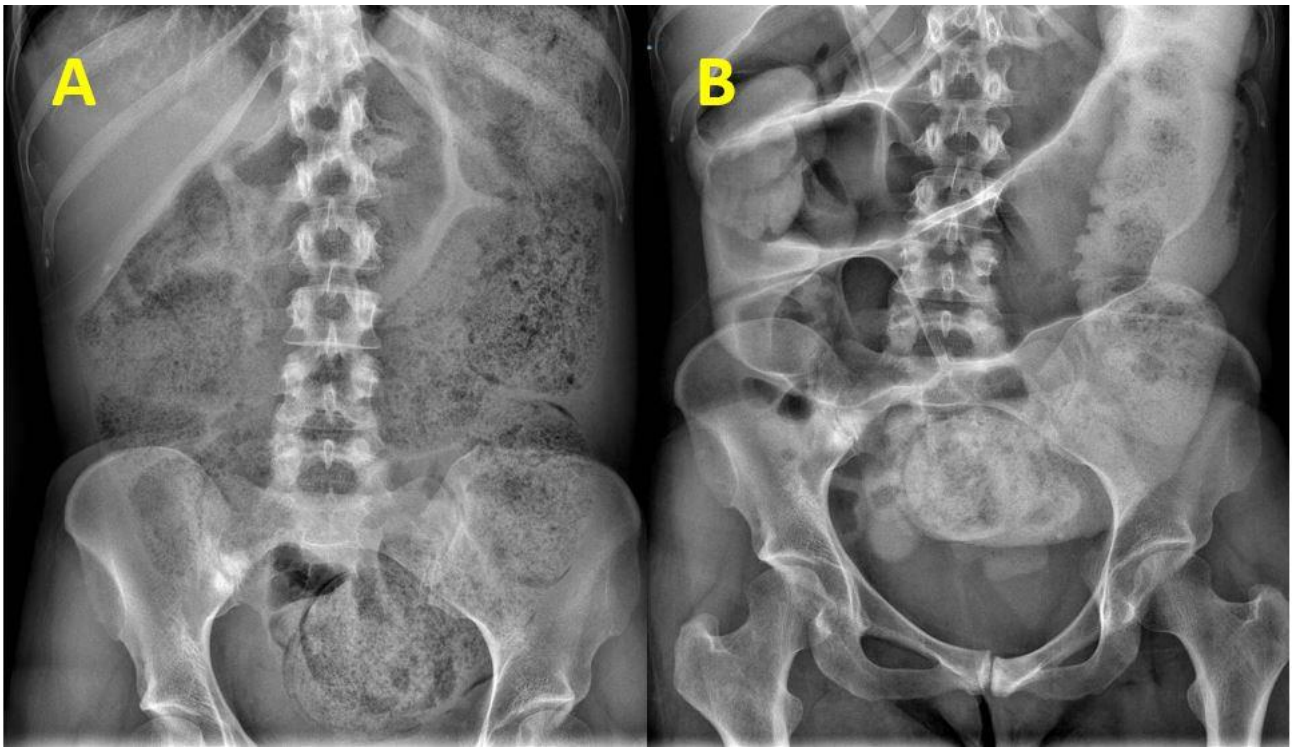

Figure 1: (A): X-ray of the abdomen revealing a massive stool impact in the colon; **(B):** Note the marked reduction of stool content at the control X-ray 36 hours after neostigmine treatment.

Clinical Image

A 33-year-old woman with a 10 year-history of systemic sclerosis was admitted to the Emergency Medicine Unit of St. Anna Hospital, Ferrara, Italy, for abdominal pain, vomiting and severe constipation since about 20 days. The physical examination disclosed a distended, tender abdomen with negative Blumberg. No severe laboratory abnormalities were found. The abdominal X-ray revealed a massive colonic stool impaction with some intraluminal air-fluid levels in the small bowel (Figure 1A). A surgical consultation deemed surgery not yet indicated. A conservative approach with nothing by mouth, hydro-electrolytes replacement and oral cathartics was started but not tolerated since the patient had two episodes of vomiting leading to its discontinuation. Rectal enemas were frequently repeated but without any result. Because of worsening of the clinical picture and the risk of colonic perforation, the patient was considered to undergo a possible Hartmann's procedure. However, based on the young age and patient's clinical situation, we decided to approach a gastrointestinal prokinetic treatment as last option before surgery. Intravenous neostigmine (0.5 mg) tid was initiated and within 36 hours the patient resumed spontaneous bowel movements preceded by gas emission. The beneficial effects elicited by neostigmine were clearly demonstrable in Figure 1B. Neostigmine has been continued for other 3 days up to discharge. The presented case-image showed how severe constipation and related faecal impaction in a highly disabling disorder, such as systemic sclerosis (1-3), can be managed using cholinesterase inhibitors (4,5), a class of drugs known to promote GI motility by enhancing acetylcholine availability.

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