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Conservative Treatment about Two Cases of Caustic Burns of the Upper Digestive Tract in Adults at the Sominé Dolo Hospital in Mopti

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Abstract **Case Report**

Emergency gastrointestinal endoscopy for patients who have ingested a caustic substance may overestimate burn injury and lead to unnecessary gastric resection. Caustic gastric lesions of stage III, without immediate life threat, do not systematically require an emergency total gastrectomy. This work was to evaluate the results of a conservative attitude of gastric stage III in two patients, by only proposing surgery in the presence of clinical, biological and radiological signs of severity. Reconstructive surgery and/or endoscopic dilation may be considered depending on the occurrence of strictures. We report two cases of caustic burn of the upper digestive tract in adults at the Sominé Dolo hospital in Mopti. Both patients were referred for surgery for partial gastrectomy with gastro - entero -anastomosis. The postoperative follow-up was simple and an endoscopic control carried out on D 15 and D 30 postoperatively did not find any obstacle at the level of the anastomoses. Cardial stenosis benefited from dilation sessions at a rate of 21 days until satisfaction.

Keywords: Gastrointestinal Endoscopy, Gastrectomy, Anastomosis.

INTRODUCTION

Ingestion of acidic or alkaline caustic products can cause severe damage to the upper digestive tract. Depending on whether it is a child or an adult, the conditions under which these caustic ingestions occur, the type of lesions caused, the treatment methods and the prognosis are different [1].

Endoscopy for patients who have ingested a caustic substance may overestimate burn injury and lead to unnecessary gastric resection. Reconstructive surgery and/or endoscopic dilation may be considered depending on the occurrence of stenosis [2].

The aim of this work was to evaluate the results of a conservative attitude of gastric stage III, by only proposing surgery in the presence of clinical, biological and radiological signs of severity. We report two cases of caustic burn of the upper digestive tract in adults at the Sominé Dolo hospital in Mopti.

COMMENTS

Case 1

This is a 30-year-old man, single, mechanic, with no particular known medical and surgical history, admitted on 06/13/2019 to the emergency department of the Sominé Dolo hospital in Mopti for voluntary ingestion of hydrochloric acid, the quantity of which is estimated at 200 ml.

Examination on admission of the patient: consciousness was good, the patient was not very agitated, the conjunctivae were normal; there was no subcutaneous cervical emphysema. Her blood pressure was 100/70 mmHg, pulse 120 pulses/min, respiratory rate 22 cycles/min, temperature 36.5°C.

On examination of the digestive tract, hemorrhagic mouth ulcerations and hypersialorrhoea were noted. The abdomen was supple with diffuse tenderness, there was no defense or contracture and the pre-hepatic dullness was preserved.

The proctologic examination noted hematochesis. Cardiac auscultation found heart sounds that were audible, rapid, with no added sounds. Pulmonary auscultation was normal. The action to be taken was the performance of additional emergency examinations: the frontal chest X-ray, the ultrasound of the abdomen and the abdomen without preparation standing frontally taking the diaphragmatic cupolas were normal. Upper digestive endoscopy concluded with stage IIIb caustic esophagitis, stage IIIa caustic gastritis , caustic caustic duodenitis IIb of Zargar.

We proceed to a hospitalization of the patient after a surgical and Otorhinolaryngological opinion. The established protocol was: a total diet, the application of an antiseptic on the mouth ulcerations, xylocaine gel on the mouth on the ulcerations, two peripheral venous lines, parenteral nutrition based on continuous infusion of PERIKABIVEN 2000 cal over 24 hours, administration of omeprazole 40 mg intravenously /24h, dual antibiotic therapy based on ciprofloxacin and metronidazole injections, rehydration with 3 liters of solutes/24h, analgesic based on injectable paracetamol and administration of an injectable antidepressant.

Clinical -biological monitoring to correct hydro-electrolyte disorders and anemia. Fibroscopy performed one week later found caustic esophagitis stage IIIa, caustic gastro -duodenitis stage IIb and IIa. Fibroscopy performed one month later revealed stage IIa esogastritis, slight stenosis of the cardia, but cleared by the gastroscope, caustic stage I gastritis and impassable pyloric stenosis.

The patient was referred for surgery for partial gastrectomy with gastro - entero -anastomosis. The post-operative follow-up was simple and an endoscopic control carried out on D15 and D30 postoperatively did not find any obstacle at the level of the anastomoses. Cardial stenosis benefited from dilation sessions at a rate of 21 days until satisfaction.

Case 2

This is a 38-year-old man, married, teacher, with no known medical and surgical history, admitted on 06/15/2019 to the emergency department of Sominé Dolo Hospital in Mopti for ingestion volunteer of hydrochloric acid, the quantity of which is estimated at 150 ml.

Clinical examination on admission: consciousness was good, conjunctivae were normal, there was a syndrome depressive. Blood pressure was 120/80 mmHg, pulse 100 pulses/min, respiratory rate 24 cycles/min, temperature 37°C, there was no subcutaneous cervical emphysema.

On examination of the digestive tract, mouth ulcers and hypersialorrhoea were noted. The abdomen was supple with diffuse tenderness, there was no defense or contracture, the pre-hepatic dullness was preserved, the proctological examination was normal. The remainder of the examination was unremarkable. What to do: Chest X-ray from the front and the standing abdomen from the front taking the diaphragmatic cupolas were normal. Abdominal ultrasound was normal.

Emergency upper digestive endoscopy was performed and revealed a caustic esophagogastroduodenal Zargar stage IIIa burn. The patient benefited from the same therapeutic and monitoring protocol as the previous patient. Fibroscopy performed one week later revealed caustic esophagitis stage IIb, caustic gastritis stage IIIa and caustic duodenitis stage IIb.

Fibroscopy performed one month later revealed stage I esophagitis, stage IIa caustic gastritis with pyloric stenosis. The patient was referred for surgery for partial gastrectomy with gastro - entero - anastomosis. The postoperative follow-up was simple and an endoscopic control carried out on D 15 and D 30 postoperatively did not find any obstacle at the level of the anastomoses. Cardial stenosis benefited from dilation sessions at a rate of 21 days until satisfaction.

Table 1: Endoscopic lesions

Days	Case 1			Case 2		
	Esophagus	Stomach	Duodenum	Esophagus	Stomach	Duodenum
At D1	IIIb	IIIa	IIb	IIIa	IIIa	IIIa
At D7	IIIa	IIb	IIa	IIb	IIIa	IIa
AJ30	IIa	I	-	I	IIa	-

DISCUSSION

For our two cases, the esophagus was preserved and a large part of the stomach after a gastro - entero - anastemosis. Esogastrectomy was difficult to perform given the technical facilities at the Mopti regional hospital. Management was initially medical and secondarily surgery, which was a favorable option with reference to two series, which are as follows:

The first series is from Zerbib: seventy patients classified as stage III; Only 24 underwent emergency surgery (34.3%) because they presented, in addition to the endoscopic stage, one of 6 clinical and biochemical

factors of severity (abdominal tenderness, neuropsychiatric disorders, cardiovascular shock, metabolic acidosis, intracoagulation disseminated vascular disease and renal failure) [2].

Conservative treatment was initiated in the remaining 46 (65.7%) who presented only stage III without signs of severity. At the end of the follow-up period, total or partial gastric preservation was performed in the 46 patients (65.7%) and the esophagus was preserved in 38 patients (54.3%) [2].

The second series is that carried out in Paris, among 40 patients with severe gastric caustic lesions (> IIb), 28 with stage III gastric lesions (mosaic necrosis: *n* = 10 or extensive or circumferential necrosis: *n* = 18) was considered prospectively. Twenty-two patients had esophageal lesions and 6 had associated stage III duodenal lesions. Patients were followed by daily surgical monitoring. Total gastrectomy with esophageal exclusion or resection was only performed when there were signs of perforation [3].

Five immediate total gastrectomies were performed in emergency and 7 were performed secondarily, associated with two esophagectomies and two jejunal resections. The mortality rate was 18% (5/28). The stomach could be preserved in 16 cases (60%), 7 times completely and 9 times partially due to post-caustic stenosis. Eighteen esophagoplasties for caustic esophageal lesions or after gastrectomy were necessary without mortality [4]

CONCLUSION

Stage III gastric caustic lesions, without immediate life threat, do not systematically require an emergency total gastrectomy. A conservative attitude is possible, under certain monitoring conditions, with significant morbidity and acceptable mortality and allows the preservation of a significant number of stomachs.

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