

Duodenal Trauma. Consequences of Delay in Diagnosis[☆]



Trauma duodenal. Consecuencias del retraso en su diagnóstico

Dear Editor,

We have read with interest the article by García Santos et al.,¹ which reviews duodenal trauma injuries and describes the importance of early diagnosis because any delay increases morbidity and mortality rates. Along the same lines of this article, we present our experience with a 26-year-old female patient who had duodenal trauma secondary to a traffic accident.

Initially, a CT scan was done at a regional hospital and, given the findings of pneumoperitoneum and intraabdominal free fluid, the patient underwent emergency surgery. During surgery, only a retroperitoneal haematoma was detected in the pancreaticoduodenal region, which was not explored. Afterwards, the patient was transferred to our hospital due to chest trauma, and, 48 h later, she presented with haemodynamic instability and bilious discharge from the abdominal drain tube, so the patient was reoperated on. During the procedure, we observed a complete laceration of the second and third portions of the duodenum, as well as biliary peritonitis. We conducted a variation of duodenal diverticulisation using the closure of both duodenal stumps, a Kher tube in the bile duct, gastrojejunostomy, retrograde duodenostomy with a Foley catheter and drainage of the pancreaticoduodenal region (Fig. 1). During the immediate postoperative period, the patient presented a pancreaticoduodenal fistula and perihepatic collection, which were resolved with conservative treatment. After discharge from the hospital, she developed dumping syndrome and gastro-oesophageal

reflux with alkaline gastritis demonstrated on a follow-up endoscopy. Surgery was decided and an antrectomy was performed, with resection of the previous gastrojejunal anastomosis, and reconstruction with gastrojejunal and duodenojejunal anastomoses. Currently, the patient continues to be followed up and remains asymptomatic.

Trauma injuries to the duodenum are uncommon; their incidence is 4%–5%, and they are almost always secondary to penetrating trauma.² Clinical suspicion for duodenal injury is the key to an early diagnosis, and it should be based on physical examination and the trauma mechanism. Our patient presented with seatbelt marks, which is a sign that is related with duodenal lesions in multiple-trauma patients. Lab work and simple abdominal radiographs are not definitive for diagnosis. Therefore, most authors^{1–4} consider abdominal CT scan with double contrast the most specific initial diagnostic method for the diagnosis of this lesion in haemodynamically stable patients. The finding of a retroperitoneal haematoma in zone I during laparotomy, particularly paraduodenal, should alert us to a possible duodenal trauma, requiring exploration.⁵ In our patient, the omission of this exploration led to the delayed diagnosis of the duodenal perforation.

For some authors,^{2,6} most cases of duodenal trauma can be resolved with a primary suture. Nonetheless, a delayed diagnosis, as in our case, requires complex surgical procedures such as pyloric exclusion or duodenal diverticulisation, which increase morbidity and mortality, hospital stay, complications and reoperations in these patients.



Fig. 1 – Fistula in the second-third portion of the duodenum.

Conflict of Interests

The authors have no conflicts of interests.

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[☆] Please cite this article as: Builes Ramírez S, García Novoa MA, Fernández Soria N, Gómez Gutiérrez M. Trauma duodenal. Consecuencias del retraso en su diagnóstico. *Cir Esp.* 2016;94:204–205.

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2173-5077/

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