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Case Report

# **Duodenal Diverticulosis: About a Case**

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#### Abstract

The duodenal diverticulum is defined as a hernia from the mucous membrane through the muscularis. This condition is usually asymptomatic and fortuitous finding. It can be revealed by its complications: infectious or hemorrhagic. In this work we will present a case of a patient who was admitted for epigastralgia and upper endoscopy objectified three largeuncomplicated duodenal diverticulum.

Keywords: Duodenal, Diverticulosis, Muscularis, largeuncomplicated.

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# **INTRODUCTION**

The duodenal diverticulum is defined as a hernia from the mucous membrane through the muscularis. The first case reported in the literature is that described by Chromel in 1710 [1]. It represent the second diverticular location after the colon [2]. This condition is usually asymptomatic and fortuitous finding. It can be revealed by its complications: infectious or hemorrhagic; most often requiring emergency surgical management. The complications can occur in 5 to 20% of cases [3]. Currently imaging and endoscopy can make the diagnosis and limit the indication for emergency surgery. In this work we will present a rare case of a woman who presents three large uncomplicated duodenal diverticula.

# **CASE PRESENTATION**

We present a 74-year-old woman with a history of type 2 diabetes, operated on 20 years ago for hernia of the white line, admitted to the emergency department for an occlusive syndrome because of the eventration enventration. The patient underwent emergency surgery with right hemcolectomy and placement of a double stoma.

Postoperatively, the patient presented epigastralgia with no associated hematemesis, hence the indication for a duodenal esogastrofibroscopy which showed gastric stasis with no sign of bleeding, and in the duodenum three large uncomplicated diverticula. The patient treated with symptomatic treatment with a good evolution.



Fig-1: Image of the first diverticulum



Fig-2: Image of the second diverticulum

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Fig-2: Image of the third diverticulum

# **DISCUSSION**

Duodenal diverticula, in good standing, asymptomatic, are most often diagnosed incidentally during a check-up imaging [2, 4]. Indeed, Akhrass *et al.* [5], in a largeseries of 208 patients, show that hemorrhage digestive tract more frequently complicates duodenal diverticula (52%), than small bowel diverticula (12%).The duodenal diverticulum in the periampullary position is likely to be responsible of a specific complications; either of a mechanical nature by compression or by obstruction, or functional by sphincter incompetence [3, 6].

Scanner with oral intake of a product of contrast is, for most authors, the examination of choice for the diagnosis of duodenal diverticula. She highlights the juxtapapillary diverticula under form of rounded masses, with a clear limit, with water, air or mixed and in contact with the edge pancreatic of the second duodenum [7]. In case of perforation, it highlights direct signs, type of extra-digestive gas effusion intra- or more often retroperitoneal, generally located in the right anterior pararenal space. An extraduod leak'- effect of the contrast product can be seen in 26% of case. In posttraumatic perforations, one can observe a periduodenal hematoma. In cases of diverticulitis, it may show parietal thickening of the diverticulum with narrowing and deformation of its light, associated with felting of the retroperitoneal fat adjacent [7].

In general, duodeno-grelic diverticula asymptomatic or pauci-symptomatic should not be operated on; regular monitoring is widely recommended and this solution was adoptedfor our patient [8]. Surgical treatment is only indicated in case of perforation or occlusion acute bowel. In the event of a hemorrhagic complication, digestive arteriography with embolization is likely to provide a therapeutic solution thus constituting an alternative to surgery [2]. Some diverticular cases treated endoscopically have been reported in the literature with a good evolution [9, 10].

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