INTERNATIONAL JOURNAL OF CURRENT MEDICAL AND PHARMACEUTICAL RESEARCH
ISSN: 2395-6429, Impact Factor: 4.656
Available Online at www.journalcmpr.com
Volume 6; Issue 01(A); January 2020; Page No. 4925-4926
DOI: http://dx.doi.org/10.24327/23956429.ijcmpr202001834

Research Article

# OCCLUSIVE SYNDROME IN INTESTINAL CYSTIC PNEUMATOSIS, MEDICAL TREATMENT OR SURGERY

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**ARTICLE INFO**

***Article History:***
Received 6th October, 2019
Received in revised form 15th November, 2019
Accepted 12th December, 2019
Published online 28th January, 2020

***Key words:***
intestine, cystic pneumatosis, occlusion syndrome.

**ABSTRACT**

Intestinal cystic pneumatosis is a rare pathology, its causes still not clearly established, occlusive syndrome is not common manifestation of this pathology. Computed tomography led to diagnosis. The treatment is principally medical, containing symptomatic measures, for the majority of cases; surgical abord is reserved for complicated cases. We are reporting two cases with different treatment decision referring to clinical evolution.



## INTRODUCTION

Intestinal cystic pneumatosis (ICP) is defined by the presence of gaseous cysts in the intestinal wall [**1**]. We report two cases received in the emergency department at the surgical hospital Ibn Tofail UHC Med VI Marrakech.

***Case 1***: a 43 years old man, with abdominal trauma a week ago, presented for vomiting with abdominal distension and stopping of materials and gases (SMG) for 3 days, examination found abdominal distention, generalized abdominal pain, leukocytosis at 20.103 elements / mm3, a correct ionogram, the standard abdominal X rays :small bowel hydroaeric levels (HAL) , abdominal computed tomography(CT): huge hail distention and cystic formations suggestive of parietal pneumatosis, the patient benefited from the establishment of a nasogastric tube (NGT) with medical treatment (metronidazole and anti spasmodic), in front of the exacerbation of clinical signs and the onset of fever, the patient was operated on, surgical exploration found, a hailic distension with diffuse hail pneumatosis( figure1), the gesture consisted in an enterovidange of the healthy small bowel segment with pneumatose bleb biopsies, the operative follow-ups were simple, the pathological examination concluded to ICP.

***Case 2***: a 40 years old woman, followed for gastric ulcer with Helicobacter pylori +, under treatment and in gynecology for infertility with irregular menstrual cycles, admitted to the emergency department for generalized abdominal pain with SMG for 2 days, preceded by episodes of diarrhea and vomiting, in a context of fever at 38 ° C, the clinical examination found abdominal distention with generalized sensitivity, leukocytosis at 17.103 elements / mm3, CRP at 170 mg / l; abdominal X rays has objectified small bowel HAL ; abdominal ultrasound: peritoneal effusion slide with multi-cystic ovaries. Abdominal CT: small bowel distention without obvious obstacle with multiple cystic formations at the level of the intestinal wall and diffuse localization realizing a grape bunch appearance evoking ICP. The treatment consisted in a conditioning of the patient with implementation of NGT, treatment with C3G antibiotics and metronidazole was instituted in addition to antispasmodic and antipyretic, the evolution was marked by the resumption of transit and the disappearance of the fever at the end of 24h, the patient was declared outgoing on D3 of hospitalization.

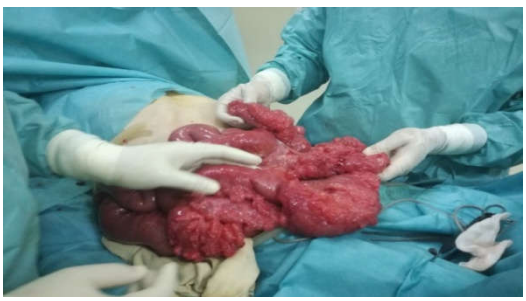

**Figure 1** Diffuse cystic pneumatosis

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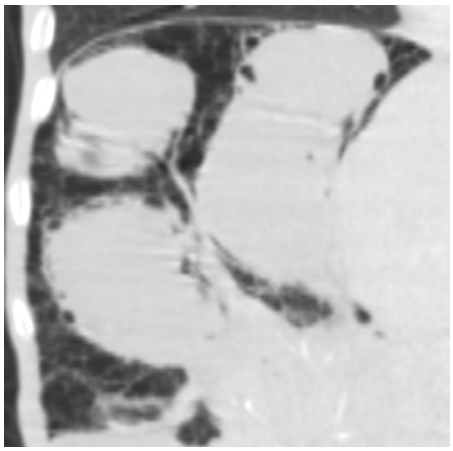

**Figure 2** patient 1, huge hail distention and cystic formations suggestive of parietal pneumatosis

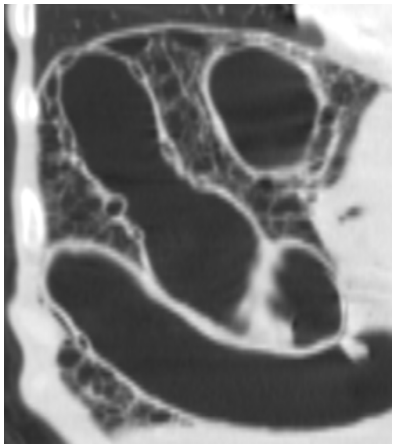

**Figure 3** patient 2, multiple cystic formations at the level of the intestinal wall and diffuse localization realizing a grape bunch appearance evoking ICP.

## DISCUSSION

The ICP affects the man between 40 and 50 years and is secondary to other pathologies: chronic inflammatory bowel disease, gastroduodenal ulcer [**2**], pulmonary diseases and auto-immune pathlogies such as scleroderma and dermatomyositis [**7,8**] . Taking certain medications such as alpha-glucosidase inhibitors, anti-psychotics, chemotherapy and occupational exposure to trichlorethylene. The mechanism of formation of gaseous cysts is multifactorial: loss of mucosal integrity, elevation of endoluminal pressure, changes in bacterial flora and hyperproduction of intestinal gas [**3**]. ICP is usually paucisymptomatic, revealed by nonspecific signs in 30% of cases such as diarrhea, bloody or glairy stools, meteorism, vomiting, constipation, and tenesmus. Intestinal obstruction is a rare complication related to the number and size of cysts that can reduce the intestinal lumen and lead to occlusive syndrome. Other complications related to cystic volume have been described: volvulus, intussusceptions, perforation, and hemorrhage [**4**]. Computed tomography has a good diagnostic accuracy. It reveals images of gaseous density in the digestive wall, better visible in the lung window [**5**].

The association with asymptomatic pneumoperitoneum is almost pathognomonic [**1**]. An important diagnostic criterion to rule out acute intestinal pneumatosis is the absence of an aeroport for CT [**5**]. Endoscopic examinations confirm submucosal cysts. To properly manage patients; treatment of benign ICP is medical, surgical treatment is for complications [**6**], It is a risk-benefit decision [**9**]. In the first case, the patient is operated on the exacerbation of clinical symptomatology, the onset of fever and severity of the occlusive syndrome, unlike and given the clinical improvement, the second case was treated medically.

## CONCLUSION

Intestinal cystic penumatosis is a rare condition, often asymptomatic. It is a rare cause of bowel obstruction, whose diagnosis is based on CT; surgical treatment is reserved for complicated forms.

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**How to cite this article:**

M.G. Rachid, T. Sadok, Y. Narjis and R. Benelkhaiat (2020) ' Occlusive Syndrome in Intestinal Cystic Pneumatosis, Medical Treatment Or Surgery', *International Journal of Current Medical and Pharmaceutical Research,* 06(01), pp 4925-4926.

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