

Association of Fitz-Hugh-Curtis syndrome in chronic phase and simple mesothelial cyst in an adult man. Case report

Asociación de síndrome de Fitz-Hugh-Curtis en fase crónica y quiste mesotelial simple en un hombre adulto. Presentación de un caso

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Abstract

Objective: Presentation of a case little reported in the literature of Fitz-Hugh-Curtis Syndrome regarding gender and its association with simple intra-abdominal mesothelial cyst. **Method:** A bibliographic source was compiled regarding the unusual presentation of the syndrome in males and its association with the simple mesothelial cyst. **Results:** The affectation in men is infrequent, with only 10 reported cases. The simple peritoneal mesothelial cyst has an approximate incidence of 1/1,000,000. **Conclusions:** We are faced with an unusual presentation in terms of pathology and association, so it is important to carry out the case report.

Keywords: Fitz-Hugh-Curtis syndrome. Mesothelial cyst.

Resumen

Objetivo: Presentar un caso, poco reportado en la literatura, de síndrome de Fitz-Hugh-Curtis en cuanto al sexo y su asociación con quiste mesotelial simple intraabdominal. **Método:** Se realizó la recopilación de fuentes bibliográficas respecto a la presentación inusual del síndrome en el sexo masculino y su asociación con el quiste mesotelial simple. **Resultados:** La afectación en varones es infrecuente, con solo 10 casos reportados. El quiste mesotelial simple peritoneal tiene una incidencia aproximada de 1/1,000,000. **Conclusiones:** Nos encontramos ante una presentación inusual en cuanto a patología y asociación, por lo que es de relevancia realizar el reporte del caso.

Palabras clave: Síndrome Fitz-Hugh-Curtis. Quiste mesotelial.

Introduction

The Fitz-Hugh-Curtis syndrome is a type of perihepatitis characterized by adhesion between the anterior surface of the liver and the abdominal wall. It is thought to be caused by the migration of pathogens (*Neisseria*

gonorrhoeae, *Chlamydia trachomatis* and other sexually transmitted bacteria) from a pelvic infectious process. It is very rare to occur in men, with only 10 cases reported in the literature^{1,2}.

The gonococcal infection with hematogenic or lymphatic spread has been proposed as the underlying

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mechanism of perihepatitis in men. It has also been associated with ectopic appendicitis or infection of the urinary tract, and may develop without any specific cause in men. According to the pathologic findings, it is classified into an acute phase and a chronic one. The mild exudative inflammation of the liver surface is the main manifestation of the acute phase, while the “violin string” adhesions between the anterior surface of the liver and the abdominal wall are considered pathognomonic of the chronic phase².

The Fritz-Hugh-Curtis syndrome is a diagnosis challenge as its main symptom is pain in the upper right abdominal quadrant, which is likely to be confused with a biliary disease^{1,2}.

The simple peritoneal mesothelial cyst is a rare benign tumor that originates at the endothelial cells of the body cavities. It has an approximate incidence of 1/1,000,000³. Its etiology is unknown; however, some authors support the congenital theory and others suggest they are reactive lesions as result of traumatic or inflammatory processes of the abdominopelvic peritoneum tissue⁴.

Clinical case

49-year-old male with medical history of obesity class 1, an umbilicoplasty 9 years ago, smoking and alcoholism of 20 years of progress.

The current condition begins with 1-month history of abdominal pain, colic type, of 6/10 intensity, at the epigastrium and right hypochondrium, after the intake of cholecystokinetics. It exacerbates 2 days before his admission to the emergency department, together with gastric-bilious vomiting in nine occasions, resulting in his consultation. At his admission, the patient shows icteric coloration of the sclerae and integuments, appropriate hydration state, abdomen with abundant soft compressible adipose panniculus, tender to deep palpation at the right hypochondrium, presence of peristalsis, and no data about peritoneal irritation. The laboratory tests show: hemoglobin 18.9, hematocrit 55.6, platelets 119, white blood cells 9.4, neutrophils 90%, lymphocytes 3.2%, glucose level 177, urea 60.78, creatinine 1.06, lipase 853, amylase 473, total bilirubin (TBil) 10.4, indirect bilirubin (IBil) 3.23 and direct bilirubin (DBil) 7.1. The ultrasonography of the liver and its bile ducts report signs of choledocholithiasis, with gallbladder hydrops and associated pancreatic inflammatory process. The endoscopic retrograde cholangiopancreatography reports a probable chronic liver disease, through filiform intrahepatic bile duct and

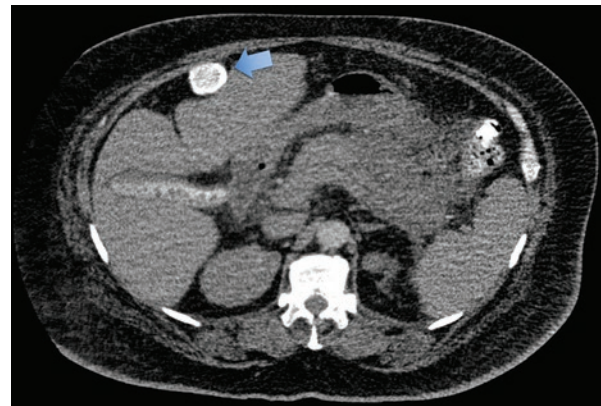


Figure 1. CT scan of the abdomen, axial section, which shows a round image of about 4 cm x 7 cm, with heterogeneous content, of 83-337 HU, anterior to segment III, with hyper-dense contour as sign of calcification.

lithiasic cholecystitis with probable hydrocholecyst. The contrast CT scan of the abdomen and pelvis reports signs of acute pancreatitis Balthazar E, hepatosplenomegaly, portal vein of 21 mm, dilation of the intrahepatic and extrahepatic bile duct, cholelithiasis, free fluid at the peritoneal cavity, bilateral pleural effusion, secondary passive atelectasis and heterogeneous nodule with densities of 83-337 HU, calcified intraperitoneal anterior to segment III (Fig. 1).

A laparoscopic cholecystectomy is performed with trans-surgical findings of loose and firm adhesions of gallbladder to the omentum and abdominal wall, important firm adhesions in shape of “violin string” between the liver segments II, III and IV and the abdominal wall (Fig. 2A), gallbladder of 12 x 8 x 4 cm with many calculi inside, calculi in the cystic duct, which is 4 mm, and nodular lesion at the omentum of 7 x 5 cm with firm adhesions towards the round ligament (Fig. 2B). With a favorable post-surgical course, the patient is discharged due to improvement. The pathology report is collected with a diagnose of simple mesothelial cyst (Fig. 3).

Discussion

Due to the medical history and the clinical pattern of the disease, the cases in which “violin string” abdominal adhesions are confirmed through laparoscopy or laparotomy, and in which there is identification of causal bacteria at the exudate of the liver capsule, are diagnosed as Fitz-Hugh-Curtis syndrome. The noninvasive diagnosis is performed by taking into account the clinical presentation, the culture tests and the results of the CT scan⁵.

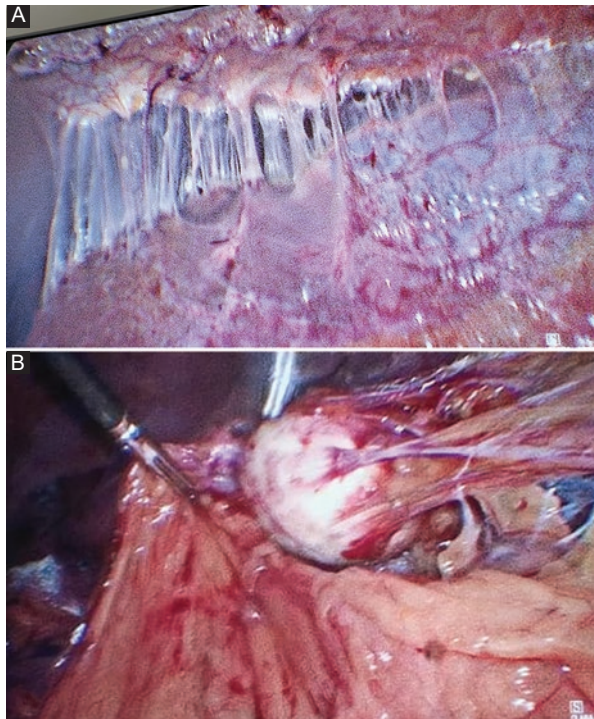


Figure 2. Trans-surgical findings. **A:** “violin string” adhesions. **B:** simple peritoneal mesothelial cyst with multiple adhesions.

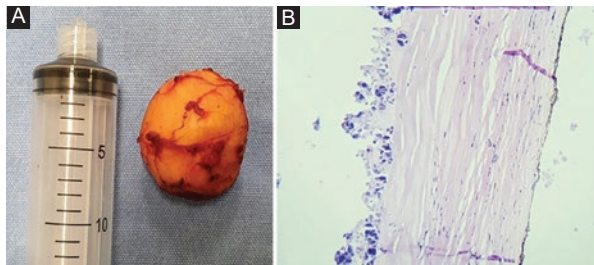


Figure 3. Simple mesothelial cyst. **A:** macroscopic image. **B:** histological section.

The simple peritoneal mesothelial cyst is frequently diagnosed by image or surgical accidental finding. It may be confused with peritoneal metastases. The predisposing factors include previous surgery, pelvic inflammatory disease, and endometriosis, as they are considered to alter the peritoneal resorption³.

This would support the hypothesis of a subclinical pelvic inflammatory disease in this case, which caused a perihepatitis with formation of “violin string” adhesions. (Fig. 2A) and a simple peritoneal mesothelial cyst (Fig. 2B).

The pathologies described in this work, and specially the Fitz-Hugh-Curtis syndrome, albeit its low incidence

and more so in men, must be considered at the differential diagnosis of chronic abdominal pains. If after the implementation of diagnostic methods there is no conclusion on the cause of the abdominal pain, it is preferable to perform a diagnostic laparoscopy.

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Conflicts of interest

The authors declare there have not been any conflicts of interest.

Ethical disclosures

Protection of people and animals. The authors declare that no experiments were carried out on humans or animals for this research.

Data confidentiality. The authors declare that they have followed their center’s protocols on the publication of patient data.

Right to privacy and informed consent. The authors have received the approval of the Ethics Committee for the analysis and publication of the clinical data obtained routinely. The informed consent of the patients was not required as this is a retrospective observational study.

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