



Case Blog

Title: Pain in Right Fossa Iliac, Anorexia and Fever as the Only Data in Acute Appendicitis

Guillermo Padrón Arredondo*, María Dolores Barraza García and Carlos Contreras Mejorada

General Surgery Department, General Hospital of Playa del Carmen, Q. Roo México, USA

Summary

Introduction: Acute appendicitis is the most common abdominal emergency in general surgery and diagnostic still remains strictly clinic.

Case presentation: A 9 years old girl is presented in the emergency department because of abdominal pain of 48 hours of evolution, with dysuria, anorexia and a history of a month ago showed clinical urinary tract infection and gastroenteritis probably infectious. Physical examination showed only the right lower quadrant pain and fever which was treated surgically with a preoperative diagnosis of appendicitis was confirmed during surgery.

Discussion: It has always been said that the diagnosis of appendicitis is mainly clinical, and there are studies that reinforce this concept and although it is the most common surgical emergency, diagnosis still remains some difficulty mainly at the start of the pathology. Particularly when the patient presents with clinical isolates with pain in the right lower quadrant with no evidence of clinical inflammation. Few studies report similar cases and some authors exclude the diagnosis of acute appendicitis in the context of a similar clinical picture. The case drew attention because the patient only much localized pain presented high fever accompanied by emphasizing the purely clinical diagnosis is often sufficient for diagnosis and treatment.

Introduction

Acute appendicitis is the most common abdominal emergency in general surgery and diagnostic still remains strictly clinic. Its handling is prior appendectomy start with antibiotics and analgesics postoperatively continued according to the needs and circumstances of the patient. Primrose A. 2 in your article emphasized: let us take for analysis the very common series of phenomena in acute appendicitis where we have localized rigidity of the muscles of the abdominal wall and an area of the superimposed skin hypersensitive. In another hand, Cope VZ 3 establishes que la superficial hyperesthesia in often present in acute abdominal disease and is occasionally of considerable value in diagnosis. In young people the right iliac triangle is confirmatory of appendicitis and the narrow band of hyperesthesia above and parallel to Poupart's ligament is commonly present in subacute and subsiding appendicitis. Gillespie WF 4 refers to acute appendicitis is recognized by appearance of the following, in the order described by John B. Murphy: 1) abdominal pain; 2) nausea and emesis; 3) iliac tenderness; 4) fever, and 5) leukocytosis.

Case Presentation

A 9 years old girl is presented in the emergency department of our hospital because of abdominal pain 48 hours after onset with fever, dysuria and anorexia, with a history that a month ago he presented clinical symptoms of infection pathways urinary and gastroenteritis. And a clinical picture of classic dengue also allergic to cefixime.

Physical examination presented with moderately dehydrated oral mucosa, amygdalin hypertrophy without hyperemic pharynx, soft abdomen and palpable abdominal tenderness in the right lower quadrant (point Mac Burney positive) limiting ambulation, with dubious talopercussion normal peristalsis without peritoneal irritation and other negative maneuvers, right Giordano (+) and no evidence of peritoneal irritation; without cardiopulmonary pathological data, other physical examination within normal parameters. Vital signs on admission: HF: 100 × min, BF: 22 × min, BP: 90/60, Temperature: 39°C. laboratory study is requested with the following results: Normal red blood count formula, white formula with 8200, total 57% neutrophils, 57% segmented neutrophils normal rest; Normal blood chemistry, urinalysis with 7-9 leukocytes field x normal rest; normal serum electrolytes. Plain abdominal radiographs in two positions of normal appearance, and lower abdominal ultrasound to be reported as within normal limits.

With the above information and despite support diagnoses were negative for clinical concluded that the case was acute appendicitis, impregnation with antibiotics and analgesics starts and undergoes surgery. Davis Rockie-type incision is made and appendix obtained with necrotic inflammatory process and fibrin in the middle and upper third with healthy initial classifying as acute gangrenous appendicitis Grade III, the patient progressed satisfactorily.

*Corresponding author: Arredondo GP, General Surgeon and Endoscopist Av. Constituyentes con calle 135 s/n Colonia Ejidal. Solidaridad Playa del Carmen, Q. Roo México, USA, Tel: 01-984-2061691; E-mail: gpardonarredondo@hotmail.com

Copyright: © 2016 Arredondo GP, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Discussion

Since always it said that the diagnosis of appendicitis is mainly clinical, and there are jobs like Monneuse O et al. [1] which reinforce this concept and although it is the most common abdominal surgical emergency, diagnosis still remains true degree of difficulty mainly the onset of pathology [2,3]. Particularly when the patient presents with clinical signs isolated pain in the right lower quadrant without data from clinical inflammatory process. Few studies report similar cases and some authors exclude the diagnosis of acute appendicitis in the context of a similar clinical picture [4,5]. Furthermore, Melanie DW et al. [6] Refer to the paucity of symptoms and signs in the right lower quadrant two not exclude appendicitis. And gastroenteritis colic and constipation are the greater masqueraders of pediatric appendicitis.

The pathophysiological basis of obstructive appendicitis is appendiceal lumen process followed by an infection and in 60% of patients the obstruction is caused by hyperplasia of submucosal follicles. This form of obstruction is common to observe in children, as was the case, and is known as catarrhal appendicitis, because of this, some authors suggest that treatment of this condition and in these cases it may be only with antibiotics but often there process recurrency [7,8].

However, due to technological advances in medicine, ultrasound, CT and laparoscopy are offered as highly accurate studies for the diagnosis of this disease. Authors such as Horton MD et al. [9,10] propose that in rare cases the use of ultrasound and positron, which has 100% specificity and 97% sensitivity at 90% specificity and 76% sensitivity for ultrasound have the disadvantage that ultrasound is very operator dependent, but does not radiate the patient and the TAC is very expensive and radiates the subject in question. However, other authors [11,12] emphasize that when ultrasound is not consistent, the traditional clinical examination provide accurate diagnosis especially in children. Kharbanda AB et al. [13,14] report that a score of 6 items: nausea (2 points), located history of pain in the right lower quadrant (2 points), migration of pain (1 point), difficulty walking (1 point) positive rebound/pain on percussion (2 points), and absolute neutrophilia $>6.75 \times 10^3/\mu\text{L}$ (6 points). With the application of the rules of low risk could be reduced by up to 20% using the TC. Similarly, state that the abdominal pain when walking, jumping or coughing and the presence of any tenderness on physical examination are appropriate for your inclusion in prediction rules for children with possible appendicitis [15].

Known has been estimated that up to a third of children with acute appendicitis have been previously evaluated by a doctor because of their symptoms, resulting in a failure diagnosis between 28 to 57% hence Bhatt M, et al., [16] used ascore composed by: right lower quadrant pain and tenderness hot, anorexia, pyrexia, emesis, pain migration, leukocytosis and neutrophilia. Finding a PAS (Pediatric Appendicitis Score) ≥ 8 determined the need for appendectomy, ≤ 4 help rule out appendicitis and PAS of 5-7 May Need Further radiologic evaluation. Using this strategy, the negative appendectomy rate would Have Been 8.8%, the missed appendicitis rate would Have Been 2.4% and 41% of image investigation would have been avoided [17].

Patients with suspected acute appendicitis requiring high diagnostic confidence as a white appendectomy involves comorbidities such as surgical wound infection, bowel obstruction, pneumonia and infertility due to damage to the fallopian tubes, although we believe that a technical refined and proper patient preparation this can be avoided substantially. However, the clinical decision to operate leads to the removal of a normal appendix of 10 to 20% of cases [18] which is within the internationally accepted range for this type of pathology.

Moreover, the diagnosis of appendicitis in infants is usually surgery. Although in some cases it is possible to detect the presence of inflammation of the appendix through an omphalocele, it is clear that the trial remains the most useful resource to identify cases of abdominal pain should be surgically treated [19,20].

Our case drew attention because the patient only presented very localized pain in right fossa iliac accompanied by high fever, emphasizing the purely clinical diagnosis in many cases, is sometimes, sufficient for proper diagnosis and treatment and diagnostic dubious studies support not necessarily be strictly govern surgical treatment once the decision to intervene operatively which confirmed the clinical diagnosis in this patient.

References

1. Monneuse O, Abdalla S, Pilleul F, Hervieu V, Gruner L, et al. (2010) Pain as the only consistent sign of acute appendicitis: lack of inflammatory signs does not exclude the diagnosis. *World J Surg* 34: 210-215.
2. Andersson RE, Hugander A, Ravn H, Offenbartl K, Ghazi SH, et al. (2000) Repeated clinical and laboratory examinations in patients with an equivocal diagnosis of appendicitis. *World J Surg* 24: 479-485.
3. Andersson RE, Hugander AP, Ghazi SH, Ravn H, Offenbartl SK, et al. (2000) Why does the clinical diagnosis fail in suspected appendicitis? *Eur J Surg* 166: 796-802.
4. Arfa N, Gharbi L, Marsaoui L, Rhouma SB, Farhati S, et al. (2006) Value of admission for observation in the management of acute abdominal right iliac fossa pain. Prospective study of 205 cases. *Presse Med* 35: 393-398.
5. Iwaczak B, Stawarski A, Czernik J, Bronowickip K, Iwaczak F, et al. (2007) Diagnostic difficulties in pediatric abdominal pain with potential appendicitis. *Przegl Lek* 64 Suppl 3: 56-60.
6. Seah MD, Ng KC (2006) Pitfalls in paediatric appendicitis: Highlighting common clinical features of missed cases. *Asian J Surg* 29: 262-266.

7. Klein MD (2007) Clinical approach to a child with abdominal pain who might have appendicitis. *Pediatr Radiol* 37: 11-14.
8. Bundy DG, Byerley JS, Liles EA, Perrin EM, Katznelson J, et al. (2007) Does this child have appendicitis? *JAMA* 298: 438-451.
9. Horton MD, Counter SF, Florence MG, Hart MJ (2001) A prospective trial of computed tomography and ultra-sonography for diagnosing appendicitis in the atypical patients. *Am J Surg* 182: 305-306
10. Martin AE, Vollman D, Adler B, Caniano DA (2004) CT scans may not reduce the negative appendectomy rate in children. *J Pediatr Surg* 39: 886-890.
11. Singh A, Danrad R, Hahn PF, Blake MA, Mueller PR, et al. (2007) MR imaging of the acute abdomen and pelvis: acute appendicitis and beyond. *Radiographics* 27: 1419-1431.
12. Wiersma F, Toorenvliet BR, Bloem JL, Allema JH, Holscher HC (2009) US examination of the appendix in children with suspected appendicitis: the additional value of secondary signs. *Eur Radiol* 19: 455-461.
13. Kharbanda AB, Taylor GA, Fishman SJ, Bachur RG (2005) A clinical decision rule to identify children at low risk for appendicitis. *Pediatrics* 116: 709-716.
14. Kharbanda AB, Stevenson MD, Macias CG, Sinclair K, Dudley NC, et al. (2012) Interrater reliability of clinical findings in children with possible appendicitis. *Pediatrics* 129: 695-700.
15. Bickell NA, Aufses AH Jr, Rojas M, Bodian C (2006) How time affects the risk of rupture in appendicitis. *J Am Coll Surg* 202: 401-406.
16. Bhatt M, Joseph L, Ducharme FM, Dougherty G, McGillivray D (2009) Prospective validation of the pediatric appendicitis score in a Canadian pediatric emergency department. *Acad Emerg Med* 16: 591-596.
17. Samuel M (2002) Pediatric appendicitis score. *J Pediatr Surg* 37: 877-881.
18. González PJM, Marcano Y (2009) Apendicitis aguda en lactante. Presentación de un caso. *Rev Med Extensión Portuguesa- ULA* 4: 89-91.
19. Lin YL, Lee CH (2003) Appendicitis in infancy. *Pediatr Surg Int* 19: 1-3.
20. Baeza-Herrera C, Salinas-Montes J, Escobar-Izquierdo MA, Garduño HMN, Godoy-Esquivel AH (2005) Appendicitis in a two-months old infant with a peritoneovaginal duct. *Gac Med Mex* 141: 421-423.