

Right iliac fossa pain syndrome

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Abstract

Pain is the most common cause of presentation to the emergency room, more than 60% of cases. The order of the most common first six locations of pain when a patient goes to see a physician is: abdomen, lower back, chest, legs, cephalic extremity, and upper limbs. In the present review we present the features of the diagnoses that are characterized by pain in the right iliac fossa.

Keywords: iliac fossa, hemorrhagic follicular cyst, cefalic extremity

Introduction

According to the International Association for the Study of Pain, pain is defined as an 'unpleasant sensory and emotional experience due to an actual or potential tissue damage or described in terms of such damage'. This definition recognizes that pain is a perception, not a sensation. Pain is the most common cause of presentation to the emergency room, more than 60% of cases are represented by the pain felt by patients. The first six locations of pain in relation with visits to the physician are: abdomen, lower back, chest, legs, cephalic extremity, and upper limbs. This sequence of pain locations suffers small modifications depending on the specific degree of each hospital and addressability by the patients⁽¹⁾.

For a physician, a serious problem is represented by any patient that wants to see a doctor due to pain (regardless of location, character, onset, and so on) the real challenge being the diagnosis and determining the treatment plan. With the development of medical science and technological progress, the causes of pain have become much easier to establish, but this does not mean that the physician can make excess use of medical tests for the simple reason that he can't set the differential diagnosis based on medical thinking⁽²⁾.

The causes of right iliac fossa pain syndrome

Acute pain localized in the right iliac fossa is the meeting point between general surgeons, gynecologists, gastro-enterologists, urologists, nephrologists, infectious diseases, internists.

The following table lists the causes of right iliac fossa pain syndrome. In the first column are the most common causes, more than 100 cases per 100,000, followed by the middle column with an average frequency, and the rarest being found with a frequency between 0-5 cases per 100,000 patients⁽³⁾.

The most common cause of pain in the right iliac fossa is represented by acute appendicitis. It starts with low intensity colic pain, epigastric or located around the navel. This pain is dull and is not enhanced by movement or coughing. In 4-5 hours, it stops and a new pain appears in the right iliac fossa. Initially the pain is moderate and persistent, it is accentuated by walk, coughing and the changing of the body position

in bed and, in a short time, it will be accompanied by nausea, anorexia, vomiting, low grade fever that occur in 12-24 hours after the onset of pain. In rare cases it can reach up to 38.50C. Constipation and diarrhea are elements that can occur in equal measure, as well as urinary frequency and dysuria (where the top of the inflamed appendix is located near the bladder). Patients can locate the pain in an area that has the size of a coin, most often in the McBurney point, Blumberg maneuver is positive, leukocytosis or deviation to the left of the leukocyte formula⁽⁴⁾.

A fairly large number of medical conditions can mimic a characteristic clinical picture of appendicitis, of which we present: pneumonia, pulmonary infarction, pleurodinia - most often a chest radiograph is sufficient to establish the diagnosis. Herpes zoster causes pain through the nerve path, it is accompanied by rashes that disappear after a 2-5 days treatment. Mesenteric adenitis and ileitis show the same appendicitis characteristic picture, with the difference that, in the ultrasound, the appendix has a normal size. Ureteric colic is accompanied by costovertebral angle pain and macroscopic hematuria; gastroenteritis, along gastrointestinal symptoms, often shows epidemiological signs (affecting several members of a community); renal or perinephric abscess is diagnosed by imaging, most often urinalysis is not modified; acute pyelonephritis responds well to antibiotic treatment. Acute osteomyelitis of the right iliac bone can be accompanied by the presence of a pseudo formations with inflammatory characteristics, the certainty exam is established with imaging, bone scan or magnetic resonance imaging.

Surgical pathology

In the following lines we remember a part from the surgical pathology that mimics the clinical picture of acute appendicitis. Cecal diverticulitis has a slower evolution, history of abdominal pain of lower intensity, the disease evolution is not characterized by new elements from one day to another (Table 1). Most often the diagnosis is established intraoperatively. If antibiotics were administered it is likely to rehave the entire symptomatology. Cecal or appendix carcinoma may be an intraoperative surprise, given that the degree of suspicion is very low and the incidence is also low. The perforated ulcer may radiate to the right

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Table 1 The causes of right iliac fossa pain syndrome

	Frequencies >100/100.000	Average frequency > 5-100	Rare > 0-5
1	Acute appendicitis	Meckel diverticulum	Right Pleurisy
	Mesenteric adenitis	Acute cholecystitis	Cecal diverticulitis
	Acute gastroenteritis	Adnexal torsion	Perforated cecal carcinoma
	Ureteric colic	Acute pyelonephritis	Intestinal obstruction with distension cecal
	Pelvic inflammatory disease	Hemorrhagic corpus luteum cyst	Volvulus cecal
	Tubo-ovarian abscess (ATO)	Endometriosis with bleeding	Appendicular carcinoma
	Ectopic Pregnancy	Crohn disease	Perforated duodenal ulcer
	Threatened abortion	ATO rupture	Myocardial infarction of the great omentum
	Hemorrhagic follicular cyst	Zoster herpes	Ileocecal intussusception
			Psoas abscess
			Arterial ruptured abdominal aneurysm
			Acute osteomyelitis of the ilium bone
			Renal and perinephric abscess
			Ileocecal tuberculosis with perforation

iliac fossa, being accompanied by signs of peritoneal irritation, pneumo-peritoneum, and the administration of Gastrografin highlights the discharge of the digestive tube content into the peritoneal cavity. Right iliopsoas abscess can be taken into account in people with a history of pyelonephritis. Acute lithiasis cholecystitis may cause pain in the right iliac fossa, but the abdominal ultrasound makes the difference. The rare causes for differential diagnosis are: Meckel's diverticulum, myocardial entero-mezenic, intussusception, cecal distention in case of intestinal occlusion of different etiologies⁽⁵⁾.

Negative appendectomy frequency is two times higher among women compared with men of the same age. One explanation for this is the fact that gynecological affections can mimic acute appendicitis very well. The most common diseases are: pelvic inflammatory disease, tubal pregnancy and inside the cyst bleeding. The lack of vomiting and emesis, ultrasound as well can establish a correct diagnosis⁽⁶⁾.

In the case of lower abdominal pain at women, that follows after a period of about two months of amenorrhea, an ectopic pregnancy may be suspected, and if the right annex is involved, it may be confused with an acute appendicitis. As symptoms we present the colicky pain that persist for several weeks. The ectopic

pregnancy suspicion can be sustained by the abdominal ultrasound, and laparoscopy or laparotomy can confirm the diagnosis⁽⁶⁾.

The cyst of the corpus luteum can cause amenorrhea, irregular menstruation and pain at deep palpation in the right iliac fossa. Vaginal examination highlights an annex that is enlarged by the volume and it is sensitive to touch.

Conclusions

A diagnosis that is ultimately established, despite all methods of investigation, the advance of technology and the level of training of the practitioner, remains the one of abdominal pain of unknown etiology, a diagnosis that does not reveals the lack of training of the physician but a reality, that this diagnosis also exists. ■

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