



Case Report

Acute appendicitis revealed by an abscess of the anterior abdominal wall: A case report

Bannar B1*, Mahad R¹, Boutakioute B¹, Ouali Idrissi M¹, Cherif Idrissi Ganouni N¹, Maaroufi Fathiallah EL², EL Boukhfaoui M², Rabbani K², Louzi A² and Finech B²

¹Radiology Department, AR-RAZI Hospital, Mohamed VI teaching hospital, Cadi Ayyad University, Marrakesh, Morocco

²General and Visceral Surgery Department, AR-RAZI Hospital, Mohamed VI teaching hospital, Cadi Ayyad University, Marrakesh, Morocco

Received: 26 August, 2020

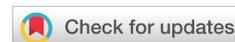
Accepted: 24 September, 2020

Published: 25 September, 2020

***Corresponding author:** Bannar B, Radiology Department, AR-RAZI Hospital, Mohamed VI teaching hospital, Cadi Ayyad University, Marrakesh, Morocco, E-mail: Bannarbadaia@gmail.com

Keywords: Appendicitis; Abscess; Abdominal wall; TDM

<https://www.peertechz.com>



Abstract

Introduction: Appendicitis is a common cause of acute abdomen; however the classic clinical signs are not often present, which can be manifested by numerous complications, but the revelation by a parietal collection remains unusual, its diagnosis can be challenging.

Presentation of case: We describe the case of a 31 years old man, who complains for pain of the right flank. The clinical examination objective an erythematous and painful swelling of the right iliac fossa, the abdominal ultrasound has objectified a collection of the right flank and right iliac fossa, The CT Scan of the Abdomen/Pelvis found a voluminous collection of soft tissues of the right anterolateral abdominal and pelvic wall, hypo dense and heterogeneous, containing air, The surgical exploration objectified a huge purulent collection with subcutaneously caecum and appendage suppurated and perforated.

Conclusion: The onset of an abdominal wall abscess without a known cause needs to be thoroughly investigated, with consideration of a subjacent abdominal cause and appendicitis.

Introduction

Appendicitis is a prevalent cause of abdominal pain, it is a typical disease of young men, with a high incidence in those aged 10–19 years and a low frequency (5–10%) in elderly individuals aged more than 50–60 years [1]. Diagnosing acute appendicitis can be challenging, as the typical clinical history and signs are not present in 30–40% of cases [2,3].

Additionally, making a diagnosis can be more challenging in some groups of patients, including elderly individuals, which contributes to a delayed diagnosis and complicated onset [2,4]. Many clinical evaluations, such as the Alvarado score [4] and further imaging examinations, such as ultrasonography, Computed Tomography (CT), are used for the diagnosis.

Presentation of case

A-31-years old man, who complains for pain of the right flank evolving for 8 days, with fever, the clinical examination found an erythematous and painful swelling of the right iliac fossa, and an elevation of the infectious balance, The first management option was to stabilize the patient with intravenous antibiotics and , electrolyte correction before imaging.

The abdominal ultrasound objectified a collection of the right flank and right iliac fossa, hypo echoic heterogeneous, poorly limited, not illuminating with color doppler, the CT scan abdomen and pelvic showed a voluminous collection of soft tissues of the right anterolateral abdominal–pelvic wall measuring: 17x10 cm and 25 cm high, quite limited, hypodense

and heterogeneous contrast spontaneous, containing air (Figures 1a-c) it could be secondary to a perforation of the appendage discretely enhanced in the periphery after contrast injection (Figures 2a-c), the caecum was subcutaneous and the appendix was not visible.

The surgical exploration objectified patient under general anesthesia, incision next to the collection with aspiration of pus and discovery of an appendix with an intact base in the center of this gangrenous collection and an appendectomy was performed with washing and drainage by two blades, one lower and the other subcutaneously.

Post-operative consequences are marked by wound suppuration, the patient is declared discharged on the 7th day of his hospitalization.

The anatomy pathology examination did not find an underlying tumor and the follow-up post operative was simple without complications.

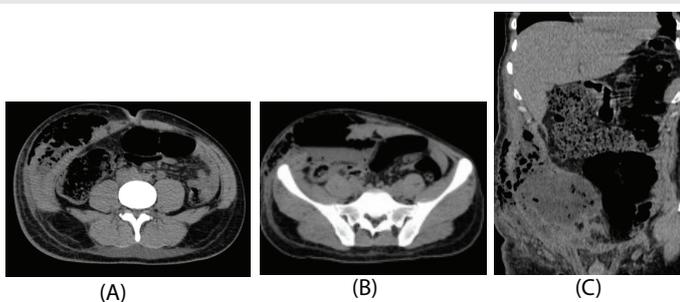


Figure 1: The CT scan abdomen and pelvic without contrast in axial and coronal section.

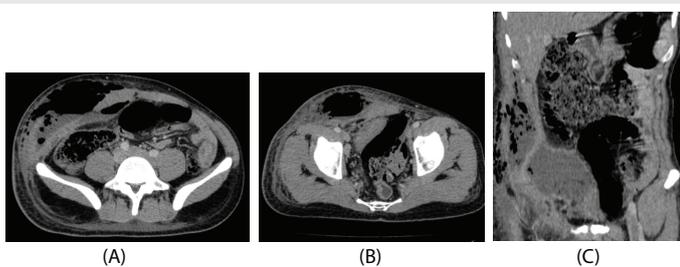


Figure 2: The CT scan abdomen and pelvic with product injection in axial and coronal sections Voluminous collection of soft tissues of the right anterolateral abdominal-pelvic wall heterogeneous, containing air enhanced in the periphery after product injection.

Discussion

The onset of an abdominal wall abscess without a known cause needs to be thoroughly investigated, with consideration of a subjacent abdominal cause and appendicitis necessitates [1].

The pathophysiology of our case remains poorly explained in the literature, we have not been able to explain the exact theory of this atypical manifestation of acute appendicitis.

In some publications in the literature we found the notion

of appendiculo-cutaneous fistula: rare complication of acute appendicitis this fistula is an abnormal communication between the digestive tract and the skin through the appendix [5].

The imaging examination, plays a very important role in the description and confirmation of the abscess of the abdominal wall, and to search its origin, and used to increase the diagnostic accuracy; however, in some patients, the diagnosis can only be made per operatively.

Ultrasound can objectify a collection of the anterior or subcutaneous abdominal wall ill-defined heterogeneous hypoechoic not lighting up with color doppler, sometimes seat of air bubbles. With an important infiltration of mesenteric fat and subcutaneous fat.

The CT better specifies the extent of the collection which is usually spontaneously hypodense increasing in periphery after injection of the product of contrast, the defect of the muscles of the abdominal wall, as well as the underwater situation of the cecum and the appendix which is sometimes perforated and will therefore be invisible.

Conventional treatment of appendicitis is surgical excision of the inflamed appendix as soon as the diagnosis is suspected to prevent perforation. Treatment may vary when the patient presents with complications. All patients with unexplained going and thigh symptoms require a thorough evaluation to exclude intraabdominal disease despite minimal abdominal signs [1]. In the present patient, the complication was the formation of an abscess of the appendices with drainage to the abdominal wall. This condition was named appendicitis necessitatis by Gockel, et al. [6]. The onset of an abdominal wall abscess without a known cause requires thorough investigation to exclude abdominal diseases, and appendicitis should be considered [7].

Conclusion

The numerous anatomical variations of the appendix partially explain the pitfalls of clinical diagnosis.

In addition to the clinicobiological couple, ultrasound is often sufficient for positive diagnosis of acute appendicitis, especially in young subjects. CT is necessary and indispensable for complicated forms (especially appendicular perforations), and for most ectopic forms. We remind finally that acute appendicitis can be manifested also by a collection of the anterior abdominal wall in the right iliac fossa, even if it remains rare in the literature.

References

1. De Souza IMAG, Nunes DADA, Massuqueto CMG, De Mendonça Veiga MA, Tamada H (2017) Complicated acute appendicitis presenting as an abscess in the abdominal wall in an elderly patient: A case report. *Int J Surg Case Rep* 41: 5-8. [Link: https://bit.ly/3mPGA0z](https://bit.ly/3mPGA0z)
2. Zbierska K, Kenig J, Lasek A, Rubinkiewicz M, Wałęga P (2016) Differences in the clinical course of acute appendicitis in the elderly in comparison to younger population. *Pol Przegl Chir* 88: 142-146. [Link: https://bit.ly/3cyCsxe](https://bit.ly/3cyCsxe)



3. Barlas SU, Günerhan Y, Palanci Y, İşler B, Çağlayan K (2010) Epidemiological and demographic features of appendicitis and influences of several environmental factors. Turk J Trauma Emerg Surg 16: 38-42. [Link: https://bit.ly/33RMxBu](https://bit.ly/33RMxBu)
4. Alvarado A (2016) How to improve the clinical diagnosis of acute appendicitis in resource limited settings. World J Emerg Surg 11: 1-4. [Link: https://bit.ly/3iTNNDs](https://bit.ly/3iTNNDs)
5. El Haoudi K, Majdoub KI (2014) Fistule appendiculo-cutanée: complication rare de l'appendicite aiguë. Pan Afr Med J 19: 194. [Link: https://bit.ly/2G3WLX0](https://bit.ly/2G3WLX0)
6. Gockel I, Jäger F, Shah S, Steinmetz C, Junginger T (2007) Appendicitis necessitatis. Der Chirurg 78: 840-842. [Link: https://bit.ly/33RRt9r](https://bit.ly/33RRt9r)
7. Singal R, Gupta S, Mittal A, Gupta S, Singh M, et al. (2012) Appendico-cutaneous fistula presenting as a large wound: a rare phenomenon-brief review; Acta Med. Indones 44: 53-56. [Link: https://bit.ly/2G4clww](https://bit.ly/2G4clww)

Discover a bigger Impact and Visibility of your article publication with Peertechz Publications

Highlights

- ❖ Signatory publisher of ORCID
- ❖ Signatory Publisher of DORA (San Francisco Declaration on Research Assessment)
- ❖ Articles archived in worlds' renowned service providers such as Portico, CNKI, AGRIS, TDNet, Base (Bielefeld University Library), CrossRef, Scilit, J-Gate etc.
- ❖ Journals indexed in ICMJE, SHERPA/ROMEO, Google Scholar etc.
- ❖ OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting)
- ❖ Dedicated Editorial Board for every journal
- ❖ Accurate and rapid peer-review process
- ❖ Increased citations of published articles through promotions
- ❖ Reduced timeline for article publication

Submit your articles and experience a new surge in publication services
(<https://www.peertechz.com/submit>).

Peertechz journals wishes everlasting success in your every endeavours.

Copyright: © 2020 Bannar B, 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.

Citation: Bannar B, Mahad R, Boutakioute B, Ouali Idrissi M, Cherif Idrissi Ganouni N, et al. (2020) Acute appendicitis revealed by an abscess of the anterior abdominal wall: A case report. Int J Vasc Surg Med 6(1): 011-013. DOI: <https://dx.doi.org/10.17352/2455-5452.000038>