

CASE REPORT

## An Abdominal Mass: A Case of Jekyll and Hyde?

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### ABSTRAK

*Kesakitan pada bahagian bawah dan kanan perut atau abdomen sentiasa disalah diagnosa walaupun doktor bedah kini bergantung pada teknik pengimejan yang terbaru. Ini adalah lebih mencabar terutamanya pada pesakit wanita dimana kesilapan diagnosa kesakitan pada bahagian bawah dan kanan abdomen adalah sebanyak 40%. Seorang wanita berumur 66 tahun hadir dengan sakit pada bahagian bawah dan kanan abdomen selama seminggu. Pada mulanya, semasa pemeriksaan dijalankan didapati terdapat ketumbuhan di bahagian perut yang disyaki barah. Skan Computed Tomography menunjukkan kasakitan abdomen kemungkinan berpunca daripada koleksi nanah. Namun demikian, prosedur jarum aspirasi menghasilkan bahan berunsur najis berwarna coklat yang mencadangkan penyakit diverticulitis. Pembedahan penerokaan perut dan membuang appendik mendedahkan appendik yang bernanah dan bukan barah. Kesimpulannya, apabila penilaian klinikal dan pengimejan tidak dapat disimpulkan, penerokaan laparotomi abdomen adalah wajar terutamanya jika barah disyaki.*

*Kata kunci: tumor caecal, apendiks gergasi, nanah*

### ABSTRACT

Right iliac fossa pain can often be misdiagnosed as something sinister or benevolent despite assistance with state of the art imaging techniques. This is particularly more challenging in the female gender whereby the error of managing a right iliac fossa pain may approach forty percent. A 66-year-old lady, ten years post-menopause, presented with a week history of progressively worsening right iliac fossa pain. Malignancy was suspected with a palpable abdominal mass. Computed tomography was suggestive of an abscess collection, but a needle aspirate produced brown faecal material suggestive of a diverticulitis. An exploratory appendisectomy

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revealed a non malignant appendicular abscess. In conclusion, when clinical and imaging assessments are inconclusive, an exploratory laparotomy for a surgical excision is warranted primarily if malignancy is suspected.

Keywords: caecal tumour, giant appendix, abscess

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## INTRODUCTION

The misdiagnosis of right iliac fossa pain is not uncommon despite the emergence of advance imaging modality such as computed tomography, ultrasonography and laparoscopy (Flum et al. 2001). The most common misdiagnoses in a female patient diagnosed with appendicitis are urinary tract infection, rupture ovarian follicle, pelvic inflammatory disease and ectopic pregnancy (Rothrock et al. 1995). The rate of error in managing pain in the right lower quadrant in the female sex or advance age can approach up to 40 percent (Andersson et al. 1992). The present short case highlights and discusses the challenge in diagnosing right iliac fossa pain in a post-menopausal patient.

## CASE REPORT

A 66-year-old lady, ten years post-menopause presented to the emergency room with a week history of progressively worsening right iliac fossa pain. The pain was continuous, dull with no radiation. She had no alteration in bowel habit and was tolerating well orally. She had no prior medical illness or surgical history. On examination, she was haemodynamically stable and afebrile. There was a well demarcated, mobile and tender right iliac fossa mass

measuring 10 x 5 cm on palpation.

Laboratory test revealed elevated inflammatory markers with a white cell count of  $16.6 \times 10^9$  and haemoglobin of 12.6g/dl. Bedside trans-abdominal ultrasound showed a 6 x 5 cm heterogeneous mass with absence of a clear capsule at the right iliac fossa. Transvaginal ultrasound by a qualified obstetrician was unable to demonstrate the right ovary despite a normal left ovary. Urgent computed tomography (CT) scan revealed a right iliac fossa mass with a central dense foci and surrounding mesenteric streakiness suggestive of a collection. Bilateral adnexal organs were unremarkable. A CT guided biopsy produced a brown faecal aspirate.

The patient gave the consent for an exploratory laparotomy and right hemicolectomy. Intraoperatively, there was a large appendicular abscess encased by the greater omentum, terminal ileum and sigmoid colon; mimicking a caecal tumour (Figure 1). Instead, an omentectomy and appendectomy was performed. Histological examination confirmed a 8.5 x 5.0 x 5.5 cm non-malignant appendicular abscess.

## DISCUSSION

A palpable large right abdominal mass in an afebrile post-menopausal



Figure 1: Intraoperative photograph of dissected giant appendicular abscess with brown faecolith and not the usual straw colored fluid content mimicking a caecal tumour and caecal diverticulitis on clinical presentation and needle aspiration respectively.

woman is highly suspicious of a gynaecological tumour. The patient was subjected to a laparotomy as CT imaging was suggestive of a perforated appendix whilst biopsy was suggestive of cecal diverticulitis. Newell et al. (1929) reported the first giant appendix weighing one pound and six ounces, mistaken for an intestinal malignancy (Newell et al. 1929). Care should be taken to avoid spillage as appendix of similar large nature may be of an appendiceal cystadenocarcinoma mucocele (Hassan et al. 2013). Moreover, the presence of an appendix mass should always be examined further as a caecal carcinoma not uncommon past the middle age (Hossian 1962).

Although CT imaging has been proven to be a robust modality in diagnosing inflammatory appendix mass, it was not a conclusive diagnostic tool for this patient (Martin et al. 2015).

In conclusion, an appendicular abscess, with minimal clinical evidence of ongoing infection should not be rule out albeit its rarity in a post-menopausal women in her sixth decade. If clinical and imaging assessments are inconclusive, an exploratory laparotomy for a surgical excision is warranted primarily if malignancy is suspected.

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### REFERENCES

- Andersson, R.E., Hugander, A., Thulin, A.J. 1992. Diagnostic accuracy and perforation rate in appendicitis: association with age and sex of the patient and with appendectomy rate. *Eur J Surg* 158(1): 37-41.
- Flum, D.R., Morris, A., Koepsell, T., Dellinger, E. 2001. Has Misdiagnosis of Appendicitis Decreased Over Time? A Population-Based Analysis. *JAMA* 286(14): 1748-1753.
- Hassan, S., Dhebri, A., Lin, L., Haque, M. 2013. Appendiceal mucocele: a missed diagnosis. *BMJ Case Rep* 2013.
- Hossian, M.A. 1962. Unrecognized Carcinoma of Caecum Presenting as Acute Appendicitis or Appendix Abscess. *Br Med J* 2(5306): 709-711
- Martin, M., Lubrano, J., Azizi, A., Paquette, B., Badet, N., Delabrousse, E. 2015. Inflammatory appendix mass in patients with acute appendicitis: CT diagnosis and clinical relevance. *Emerg Radiol* 22(1): 7-12
- Newell, E.D., Campbell, E.R., Frere, J.M. 1929. A Giant Appendix Weighing One Pound Six Ounces. *JAMA* 92(24): 2016-2017
- Rothrock, S.G., Green, S.M., Dobson, M., Colucciello, S.A., Simmons, C.M. 1995. Misdiagnosis of appendicitis in nonpregnant women of childbearing age. *J Emerg Med* 13(1): 1-8.