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Tubo-ovarian abscess in a non-sexually active adolescent girl with a proposed etiology of faecal incontinence
A Case Report

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Background

Pelvic inflammatory disease (PID) and tubo-ovarian abscesses (TOAs) are typically sexually transmitted infections. Few reports of non-sexually transmitted TOAs are found in the literature.

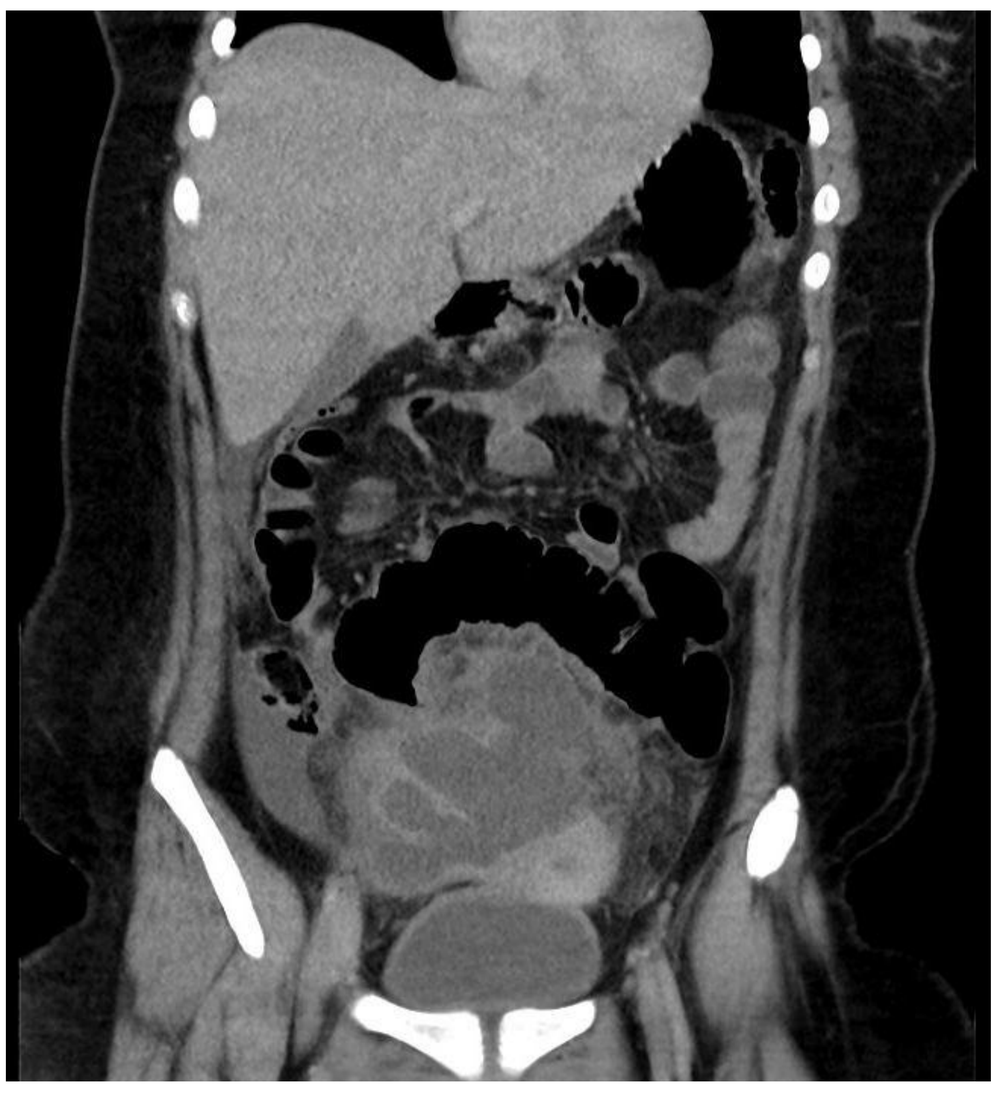
We present a case of diffuse peritonitis secondary to a TOA in a 13-year-old non-sexually active, virgo-intacta female.

Case

A post-menarche, non sexually-active girl presented to the emergency department with right iliac fossa pain, fever and long-standing faecal incontinence. Raised inflammatory markers and a right iliac fossa tubular structure arising from the caecum on pelvic ultrasound were consistent with acute appendicitis.

At laparoscopy, the appendix appeared normal but a large TOA was identified. Due to worsening peritonitis and haemodynamic instability requiring intensive care support, a laparotomy was performed one week later. This showed extensive adhesions and a perforated fundus of the uterus.

Final cultures grew *Streptococcus Viridans* and *Bacteroides Fragilis*. *Neisseria Gonorrhea* and *Chlamydia Trachomatis* cultures were negative.



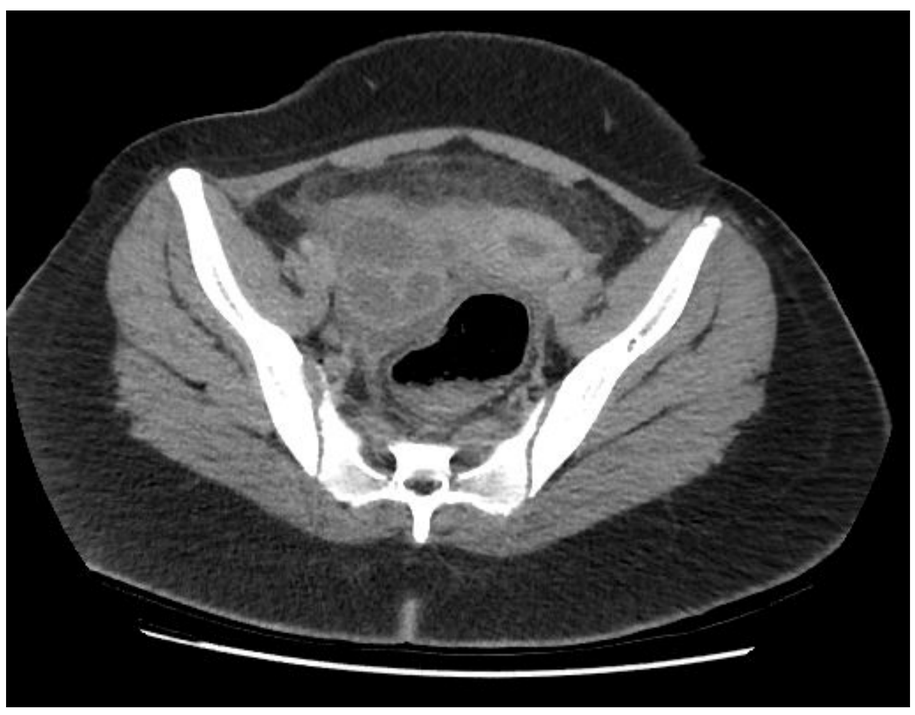
CT image showing a large multiloculated cystic collection within the lower anterior pelvis arising from the right adnexal region. The collection approximately measures 9.8x5x9.1cm (volume 220ml)

Discussion & Conclusion

Most TOAs occur in the setting of sexually-transmitted PID secondary to *N. Gonorrhoea* or *C. Trachomatis*. Case reports have suggested other potential causes including ascending lower genital tract infections, urinary tract infections, and translocation of gastrointestinal tract bacteria.[1] Other microbes frequently isolated from TOAs include *Escherichia coli*, *Streptococcus Viridans* and *Bacteroides Fragilis*[2] – two of which were present in this case. These bacteria are also frequently part of microbiota of the gastrointestinal tract.[3] This supports the hypothesis that bacterial seeding due to fecal incontinence may be the cause of TOA in our case.

TOA is a rare occurrence in non-sexually active females, and thus can be misdiagnosed and mismanaged. It is often not definitively diagnosed until the time of surgery[4] – such as in this case. Although conservative management is preferred, surgical intervention is warranted in the case of life-threatening sepsis or diffuse peritonitis.

In summary, we report a rare case of bacterial TOA in the absence of sexual activity. This case adds important information to the scant literature on TOA in non-sexually active adolescents and should raise awareness among care providers of this differential.



CT image showing a cystic collection. The appendix and right ovary cannot be separated from this lesion.

References

1. Wiesenfeld HC, Goodwin K, Fleming N, Dumont T. Tubo-ovarian abscess in virginal adolescent females: a case report and review of the literature. Journal of Pediatric and Adolescent Gynecology. 2013 Aug 1;26(4):e99-102.
2. Sweet RL. Progress in the management of tuboovarian abscesses. Clinical obstetrics and gynecology. 1993 Jun 1;36(2):433-44.
3. Cheong LH, Emil S. Non-sexually transmitted tubo-ovarian abscess in an adolescent. Journal of Pediatric Surgery Case Reports. 2013 Oct 1;1(10):378-80.
4. Hakim J, Childress KJ, Hernandez AM, Bercaw-Pratt JL. Tubo-ovarian abscesses in nonsexually active adolescent females: a large case series. Journal of Adolescent Health. 2019 Aug 1;65(2):303-5.

Disclosure

No disclosures