# Female pelvic tuberculosis and Pott's disease of the spine

Van Der Leeden M<sup>1</sup>, Cohen S<sup>2</sup> & Varol N<sup>1</sup>

1. The Royal Prince Alfred Hospital 2. St. Vincent's Hospital Sydney

## **Background**

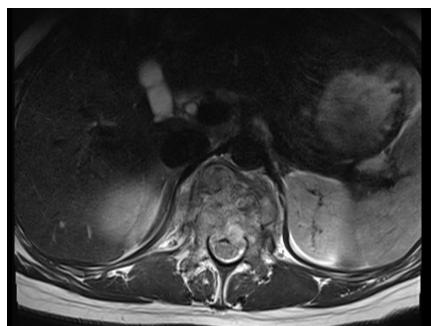
Genital tuberculosis is a chronic disease with low-grade symptoms that may mimic other gynaecological conditions<sup>1</sup>. The fallopian tubes are affected in 95-100% of cases, uterine endometrium in 50-60% and ovaries in 20-30%<sup>2</sup> of cases; causing infertility, dyspareunia, menstrual irregularities and chronic pelvic inflammatory disease (PID). An infertility clinic in Northern India found that tuberculosis was related to 48% of tubal factor infertility<sup>3</sup>, reflecting the generally higher incidence of this disease in the Global South. With a large South East Asian population presenting for treatment at our Inner City Tertiary Hospital, genital and extra-pulmonary tuberculosis need to be considered as possible causes of PID and acute and/or chronic pelvic pain. The following case outlines key features of an advanced genital tuberculosis presentation, as well as similarities of that presentation to other common differential diagnoses.

### Case

This case concerns a 24-year-old Bangladeshi woman who presented to the emergency department on multiple occasions with worsening abdominal pain and difficulty mobilising over the course of six months. She had previously been screened and treated empirically for pelvic inflammatory disease and was being investigated for infertility with an ultrasound showing hydrosalpinx and multiple cystic structures.

On her fifth presentation and second admission, she underwent a diagnostic laparoscopy which showed evidence of Fitz Hugh Curtis Syndrome, bilateral pyosalpinges densely adherent to the side wall and adhesions from the posterior aspect of the uterus and within the Pouch of Douglas. Washings and peritoneal biopsies obtained tested positive for tuberculosis and a chest CT scan looking for pulmonary tuberculosis showed Pott's disease of the spine and large epidural collections with spinal canal narrowing. Both the Infectious Disease and Neurosurgical teams were consulted and treatment commenced

immediately. She showed a rapid response and return to baseline mobility. She continues to have ongoing long-term treatment for the TB as well as neurosurgical and fertility input regarding her spine and the ability to fall pregnant and physically support a pregnancy.





**Figure 1 (Above):** Intraoperative images of adhesions throughout pelvis.



Figure 2 (Left): An MRI showing extensive bone destruction due to tuberculosis osteomyelitis.

Figure 3 (Right): A multiple resonance image (MRI) of the thoracic spine showing the large prevertebral soft tissue collection with extensive bony destruction and large epidural collection, causing moderate spinal canal narrowing without an abnormal cord signal.

### **Discussion**

Tuberculosis is an increasing public health concern worldwide. While rates of genital TB are as low as 1% in Australia, they can be as high as 19% in countries such as India<sup>4</sup>. As this disease tends to progress with low-grade changes and non-specific symptoms, we must maintain a high level of suspicion so as not to miss diagnosis and timely treatment. We also need to keep in mind the challenges faced when treating patients from culturally and linguistically diverse backgrounds and the reduced health outcomes they can face due to extra barriers when accessing our health care system.

#### **References:**

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