

Spinal Tuberculosis in the Adult Population: A 10-Year Single-Centre Audit Performed at UHCW

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Background

Spinal tuberculosis (STB) is a common manifestation of extrapulmonary tuberculosis with significant morbidity/mortality risk. Insidious onset and low yield of diagnostic tests challenge management, increasing poorer outcome risk.

Methods

A retrospective audit conducted October 2009 – 2019, extracting demographics, clinical data and outcomes from electronic patient records and the TB service database.

Results

45 cases identified. Median age: 39 years (18-87). 7% had a known TB contact, 42% had comorbidities. On admission, 78% had STB-specific symptoms, 60%: constitutional symptoms, 49%: both. 87% tested for HIV: none positive. Most frequent STB site was lumbar (49%) followed by thoracic (24%), cervical (18%), and lumbosacral (16%). 3 patients had active TB in other organs. Diagnostic biopsies or aspirations performed in 96% of patients. TB specific microbiology requested in 93% of these samples. Exposure to anti-TB drugs (ATT) for >7 days statistically significantly influenced TB culture results. 64% completed ATT beyond recommended 6 months, 38% > 9 months, and 21% for > 12 months. 13 patients received surgical treatment. All-cause mortality: 7%. Loss to follow up: 13%. 92% of patients successfully completed treatment with adequate clinical outcomes.

Key Messages

To further improve UHCW's close following of best practice leading to high rates of favourable outcomes, we recommend that:

- HIV testing be done in all patients
- Importance for prompt biopsy and cultures be further highlighted to start patients on ATT swiftly, improving outcomes further, as seen by exposure to these drugs for >7 days being negatively associated with positive TB culture results.

