

## **SPINAL TUBERCULOSIS WITH LOW ERYTHROCYTE SEDIMENTATION RATE (ESR): A CASE REPORT**

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**Introduction:** Tuberculosis (TB) remains a prevalent disease in our country especially in the East Malaysia. Erythrocyte sedimentation rate (ESR) is often used as a screening tool for chronic infections, systemic inflammatory diseases and malignancy as it is widely available in most of the facilities. In tuberculosis, the ESR is often reported to be high.

**Discussion:** A 42-year-old lady with underlying hypertension presented to us in June 2018 with low back pain for one year. X-ray showed end plates erosion over L5/S1 and ESR was 3mm/hour. She was admitted again in August 2018 due to persistent back pain despite on analgesics. ESR was 1mm/hour. Medical team treated her as smear negative culture positive pulmonary tuberculosis and started her on anti-TB. She underwent transpedicular biopsy on 24/8/2018. Acid fast bacilli (AFB) and TB culture were negative, however histopathological examination (HPE) showed non-specific chronic inflammatory cells. She subsequently defaulted follow-ups and medications until the re-admission in June 2019 due to similar presentation. ESR was 5mm/hour. She was scheduled for another MRI and it was suggestive of spinal tuberculosis. She then had persistent instability pain which was not responsive to anti-TB. Therefore, she underwent posterior lumbar interbody fusion (PLIF) in October 2019. Intra-operatively noted bilateral paraspinal muscles caseous materials and pus. Tissue for HPE showed necrotizing granulomatous inflammation. Her condition improved and she is currently still on anti-TB and follow up.

**Conclusion:** A normal ESR is not sufficient to rule out spinal tuberculosis. A strong index of suspicion is warranted especially in this part of the country where tuberculosis is endemic. Other investigations including imaging and biopsy are still indicated to diagnose spinal tuberculosis.