# Challenges in Diagnosing Lumbar Paravertebral Soft Tissue Plasmacytoma

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#### **INTRODUCTION:**

Plasmacytoma is a large colony of plasma cell which form a solitary tumour as manifestation from a systemic multiple myeloma. Differentiating between plasmacytoma and soft tissue sarcoma is crucial since the modalities of treatment is completely different.

## **REPORT:**

A 77 years old lady with underlying knee osteoarthritis was referred from arthroplasty surgeon to oncology orthopedic surgeon upon noticing of a mass on right lower lumbar paravertebral region. The mass was noticed before induction of epidural by anesthetic team while patient underwent right total knee replacement for right knee osteoarthritis.

On physical examination shown a soft tumor size of 7x8cm on right lower paravertebral region, non tender and non mobile. The CT scan shows solitary tumor of soft tissue with multiple lytic lesion seen on the vertebral body. Due to resource limitation the CT scan was only localized on the site of lesion and not extended into the thorax and pelvis area. Ultrasound guided core needle biopsy was conducted. Extensive immunohistochemical staining done showing positivity in Vimentin and CD138. However this positive result does not differentiate the origin of the tumor either mesenchymal or plasma cell neoplasm origin. The HPE shows high grade tumor which indicate the possible malignancy. Patient was finally diagnosed with plasmacytoma of right lower lumbar paravertebral soft tissue after several further laboratories and imaging studies.

#### **CONCLUSION:**

Solitarty soft tissue plasmacytoma are extremely rare.<sup>(1)</sup> Ooi et al reported extramedullary plasmacytoma only representing 4% of all plasma cells neoplasm.<sup>(2)</sup> Without a proper multimodal efficient diagnostic tools, the management of the disease might be near impossible to be carried out.

## **REFERENCES:**

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