

## INTRODUCTION

- Multiple myeloma is a malignant plasma cell dyscrasia typically diagnosed via bone marrow biopsy
- Hallmark features of myeloma include excess clonal serum immunoglobulins leading to end-organ dysfunction, anemia, and cortical bone lesions
- Plasmacytomas are extramedullary collections of clonal plasma cells that are only seen in 3.3% of patients at time of myeloma diagnosis
- Most plasmacytomas are found in the soft tissues of the head and neck but can be found elsewhere in the body to include the GI tract in extremely rare cases
- Herein, we describe a case of myeloma diagnosed solely based on biopsy proven evidence from synchronous vertebral and duodenal plasmacytomas.

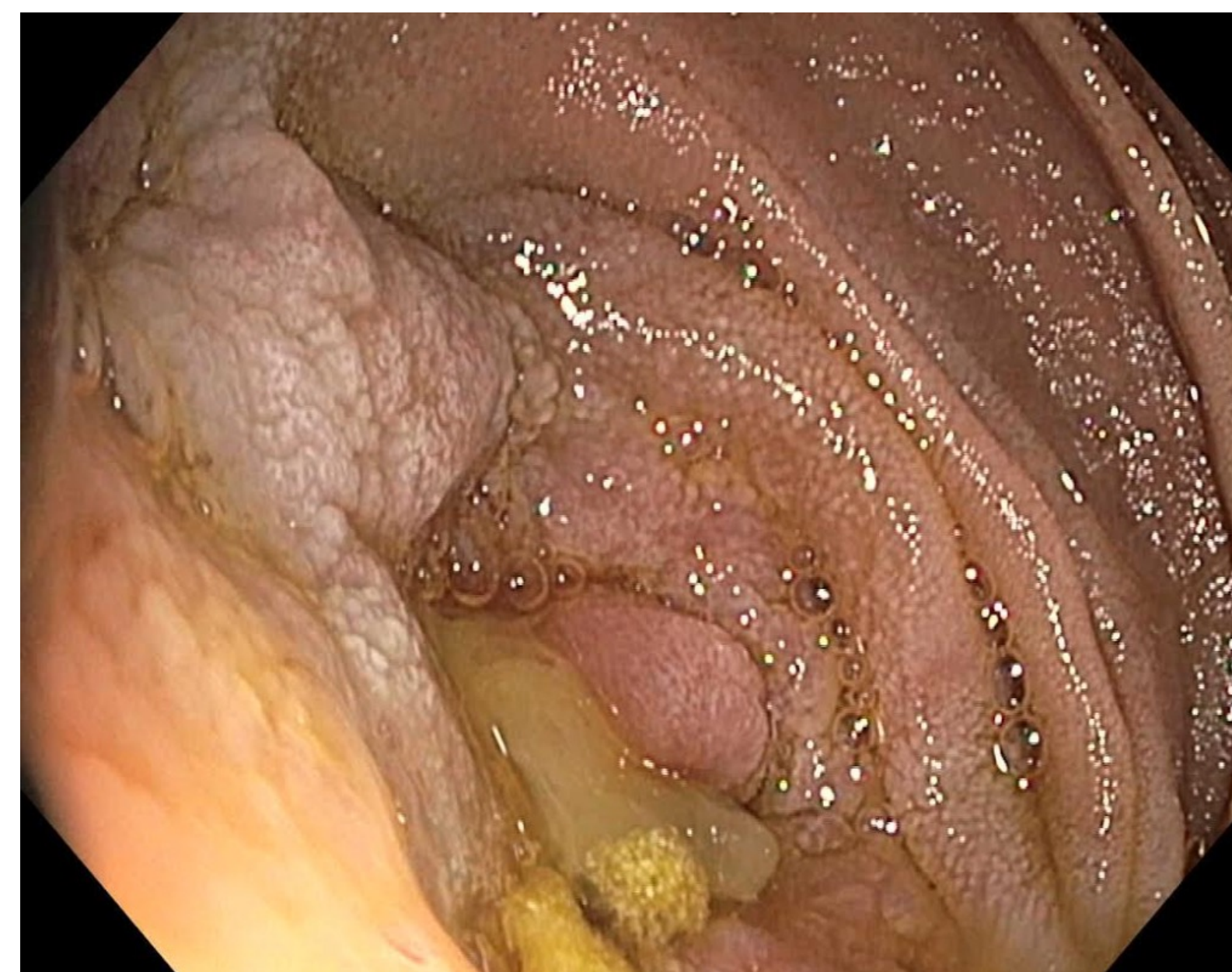
## CASE

- A 73-year-old woman presented with new onset generalized weakness, acute on chronic low back pain, and new onset bowel and bladder incontinence
- Cross-sectional imaging of the spine revealed numerous thoracic pathologic insufficiency fractures and a homogenous paraspinal tumor resulting in severe spinal canal stenosis
- Subsequent abdominal imaging revealed a 6cm circumferential mass in the third portion of the duodenum with adjacent retroperitoneal adenopathy
- Positron emission tomography computed tomography (PET-CT) was obtained but failed to demonstrate any further burden of disease
- Upper endoscopy revealed an easily friable and non-traversable mass within the third portion of the duodenum, which was biopsied for histologic evaluation
- Routine laboratory evaluation revealed normal serum calcium, creatinine, hemoglobin, and protein electrophoresis

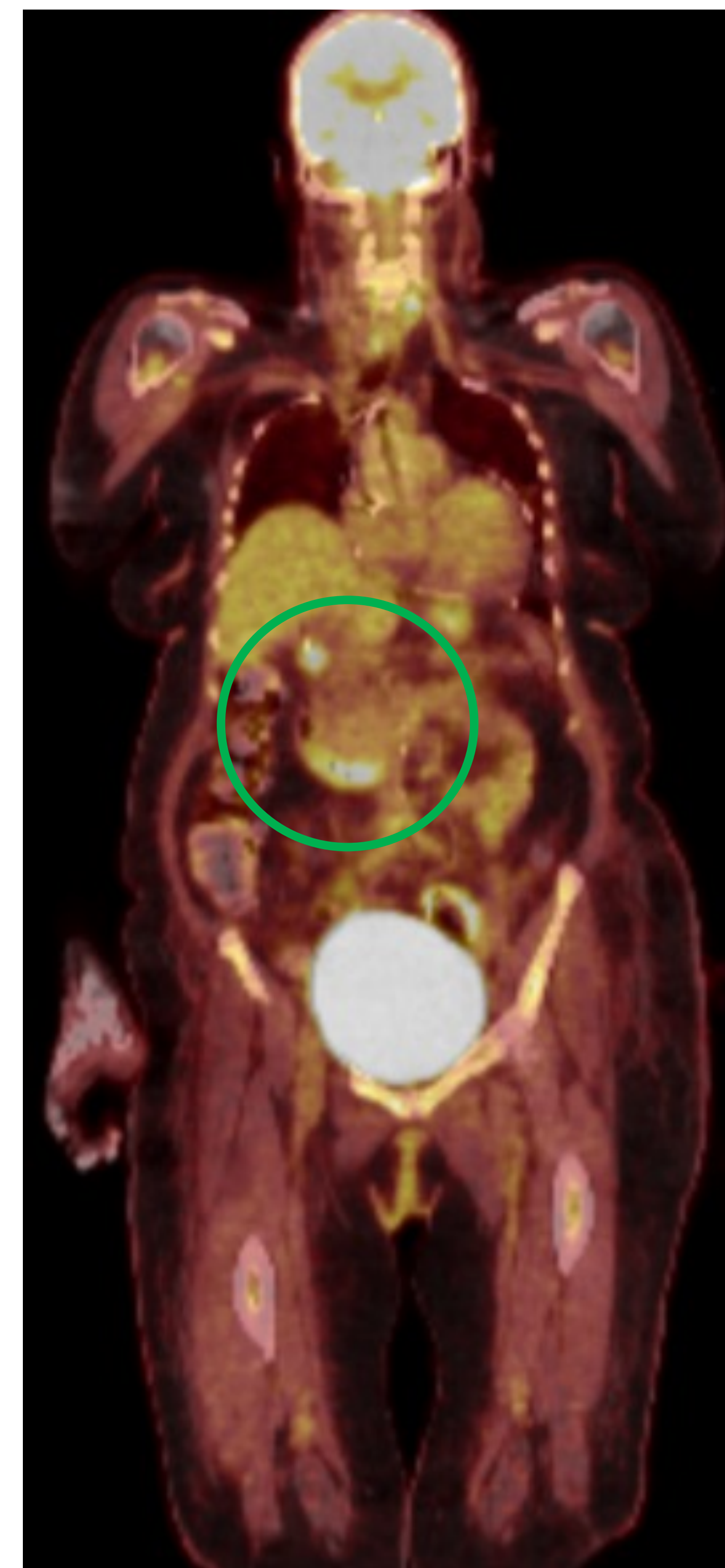
## FIGURES



1A – Coronal computed tomography (CT) of the abdomen with intravenous contrast demonstrating the 6cm duodenal-based lesion about midline



1B – Endoscopic view of the non-traversable duodenal lesion with tissue granularity and edema



1C - Coronal sections from PET-CT, revealing a metabolically active foci about the duodenum correlating with the endoscopic findings

## CASE CONT.

- Notably however, serum kappa free light chains were markedly elevated and immunofixation revealed IgA monoclonality
- Ultimately, the duodenal biopsies revealed sheets of plasma cells, which was most consistent with plasmacytoma
- Biopsy of the synchronous paraspinal lesion revealed morphologically and immunophenotypically identical tissue
- Remarkably, bone marrow biopsy revealed a relative paucity of plasma cells. However the presence of two plasmacytomas with IgA-Kappa restriction prompted initiation of chemotherapy

## DISCUSSION

- Luminal gastrointestinal involvement of plasmacytoma is an exceedingly rare finding in multiple myeloma
- Review of the literature shows that most cases of gastrointestinal plasmacytomas are found after a patient has been diagnosed with myeloma via conventional hematologic criteria
- After a patient has been diagnosed with two or greater plasmacytomas then they fulfill diagnostic criteria regardless of bone marrow involvement
- This case demonstrates a unique instance where endoscopic evaluation directly lead to the diagnosis of a classically marrow-based hematologic malignancy

## REFERENCES

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