Dr. Lance D. Dworkin Department of Medicine Research Symposium

## A Rare Case of Classical Multiple Myeloma Presenting as Cavernous Sinus Syndrome

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**Background:** Multiple Myeloma (MM) is a hematologic malignancy originating from a single clone of plasma cells, typically manifesting with symptoms such as hypercalcemia, bone pain, or incidental laboratory findings. Intracranial involvement in MM is uncommon, with its association with Cavernous Sinus Syndrome (CSS) being particularly rare. CSS, which encompasses any disease process affecting the cavernous sinus, often presents with proptosis, chemosis, ophthalmoplegia, Horner's syndrome, or trigeminal sensory loss on the affected side. It is most frequently seen in neoplasms, infections, inflammatory conditions, vascular abnormalities, or traumatic events.

**Case Presentation:** We report a case involving a 68-year-old male who developed constipation, fatigue, nausea, and vomiting over the last two months, alongside worsening double vision, eyelid drooping, vertigo, and headaches. Imaging revealed a mass in the cavernous sinus, and further investigations confirmed classical signs of multiple myeloma, including anemia, hypercalcemia, kidney injury, and bone lytic lesions in the scalp.

**Conclusion:** This case highlights the rarity of intracranial MM presenting as CSS and emphasizes the need for a high index of clinical suspicion. Clinicians should consider CSS in patients presenting with ocular symptoms and concurrent classical laboratory findings of MM, to facilitate early diagnosis and appropriate management. This approach could significantly influence patient outcomes by ensuring timely therapeutic interventions.

Keywords: Multiple Myeloma, Cavernous Sinus Syndrome, Incidental Finding