Parasellar plasmacytomas are rare tumors localized to the sellar region arising from plasma cells. Knowledge of clinical, imaging, surgical, and pathological characteristics is limited to single case reports. METHODS:

A retrospective analysis of five primary cases was conducted, followed by systematic review of English language articles using PubMed in accordance with PRISMA guidelines. RESULTS:

Five primary case patients include four men and one woman, ages 60-77, followed up to 3 years. A systematic review identified 65 additional patients, of whom 65% presented with cranial nerve palsies and 15% with hypopituitarism. Sixteen percent had history of known multiple myeloma (MM) while 37% were diagnosed concurrently with MM on presentation of parasellar plasmacytoma. Imaging showed median tumor size of 38 mm (range, 4-70 mm), with MRI intensity similar to that of other sellar masses. Surgical biopsy with immunohistochemical studies confirmed plasmacytoma diagnosis. Eighty-one percent underwent parasellar radiotherapy, and chemotherapy initiated in 59% of the 69 patients with MM. Overall survival rate was 74% at follow-up (median 12 months), with 18% having parasellar recurrences and 38% progressing to systemic MM after presentation of a solitary plasmacytoma (median 3 months). CONCLUSIONS:

Parasellar plasmacytomas are rare tumors that should be considered in the differential diagnosis for lesions involving the sella and arising from the clivus, especially when cranial nerve paresis is apparent, even in the absence of known MM. Although recurrence rates for parasellar plasmacytoma is low, patients should be monitored for progression to MM. Treatment depends on the presence of systemic disease at diagnosis [1)].

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Lee J, Kulubya E, Pressman BD, Mamelak A, Bannykh S, Zada G, Cooper O. Sellar and clival plasmacytomas: case series of 5 patients with systematic review of 65 published cases. Pituitary. 2017 Mar 1. doi: 10.1007/s11102-017-0799-5. [Epub ahead of print] Review. PubMed PMID: 28251542.