A 25 years old female presented with progressive headache and occasional transient loss of vision for last 4 months. She was newly diagnosed Hypertension for last 1 month. Clinical examinations pulse-60b/min, blood pressure 150/100 mm of Hg, bilateral papilledema and features of Acromegaly. Patient was investigated with plain and contrast magnetic resonance imaging (MRI) of brain. A lobulated T1 hypo and T2-FLAIR hyperintense mass (about 5cmx4cmx3.6cm) with few cystic areas is seen in sellar-suprasellar regions causing compression over optic chiasma and adjacent brain structures. Bilateral parasellar extension with encasement of both cavernous sinus bilaterally suggestive of the invasive nature of macro pituitary adenoma (Figure).

Pituitary adenomas are the most common tumors of the sellar region. They constitute approximately 10% of all intracranial tumors. They have slow progression but have severe impact on vision due to compression of the optic nerves, optic chiasm and cavernous sinus. Depending on the size they are classified as microadenomas (<10 mm) or as macro adenomas (>1 cm). Pituitary Tumor is called invasive when it extends into the suprasellar cistern. Pituitary adenomas are almost always benign with no malignant potential. Aggressive pituitary tumors are uncommon, with the incidence of only 2%. Such tumors proliferate rapidly and invade to adjacent tissues. MRI is the best imaging modality in the evaluation of pituitary tumors. Treatments include transsphenoidal surgery, medical therapies, and radiotherapy. Growth hormone–secreting tumors account for 8% to 16% of tumors and usually present with enlargement of the lips, tongue, nose, hands, and feet and are diagnosed by elevated insulin-like growth factor 1 levels and growth hormone levels; initial treatment is surgical. Medical therapy with somatostatin analogues, cabergoline, and pegvisomant is often also needed.

References: