Answer to medical quiz: images

1. Saggital T 1 weighted image demonstrates a large sellar mass that exhibits marked hyperintense signal change indicating blood products and recent hemorrhage. Saggital T 1 weighted post-contrast image shows same findings with no enhancement.
2. Pituitary apoplexy
3. Basal cortisol, adrenocorticotrophic hormone (ACTH), thyroid stimulating hormone (TSH), visual field analysis.
4. Immediate institution of intravenous fluid and hydrocortisone injection followed by planning for pituitary surgery.

Pituitary apoplexy: review

Pituitary apoplexy (PA) patients typically present with sudden onset headache, nausea, vomiting, visual disturbances, ophthalmoplegia and altered consciousness.[1] Headache is present in more than 80% of the patients with PA.[2] Potential mechanisms underlying headache in PA are meningeal irritation, duramater compression, enlargement of the sella turcica walls or involvement of the superior division of the trigeminal nerve inside the cavernous sinus.[3] Visual disturbances are present in more than half of the patients with PA due to the compression of optic chiasm or optic nerves. Variable degrees of visual-field impairment may be observed but blindness is rare. More than half of patients with PA have ocular motor palsy due to functional impairment of cranial nerves III, IV and/or VI.[2] Altered consciousness is the most severe neurological finding in patients with PA.[4] Common differential diagnoses of PA are subarachnoid hemorrhage and bacterial meningitis; other conditions include midbrain infarction, cavernous sinus thrombosis, migraine, hemorrhagic infarction in a Rathke's clef cyst and aneurysms. First intervention after PA diagnosis is hemodynamic stabilization, correction of electrolyte disturbances and corticosteroid administration followed by neurosurgical intervention.[5]

REFERENCES

1. Shavadia J, Mwanzi S, Hameed K. Pituitary apoplexy: report of two cases. East Afr Med J 2008 Mar;85(3): 142-4.
2. Briet C, Salenave S, Chanson P. Pituitary apoplexy. Endocrinology and Metabolism Clinics of North America 2015; 44: 199-209.
3. Chang CV, Felicio AC, Toscanini AC, Teixeira MJ, Cunha-Neto MBC da. Pituitary tumor apoplexy. Arq Neuropsiquiatr 2009;67(2A):328-33.
4. *Nawar RN*, *Abdel-Mannan D*, Selma *WR*, *Arafah BM*. *Pituitary tumor apoplexy: A review*. *J Intensive Care* Med *2008*;*23*:*75*-89.
5. Glezer A, Bronstein MD. Pituitary apoplexy: pathophysiology, diagnosis and management. Arch Endocrinol Metab 2015 Jun;59(3):259-64.