

An Uncommon Presentation of Orbital Metastases : A Case Report

Lopamudra Bhuyan¹, Sushil ku Kar¹, Z.U.Khan²

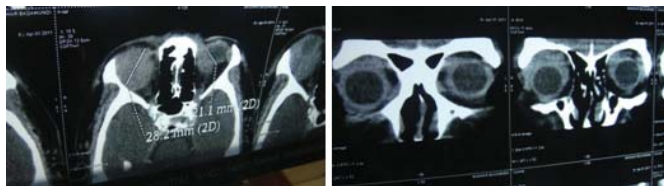
Hitech Medical College and Hospital, Health Park, Pandara, Bhubaneswar 10, Odisha, India

Professor, Hitech Medical College and Hospital, Bhubaneswar 10, Odisha, India

A 68 Year old man presented to us with complains of decreased vision in both eyes ,swelling of eyelids and redness in both eyes. On examination his best corrected visual acuity was CF 1 MT in right eye and 6/18 in left eye. On slit lamp examination there was mild conjunctival congestion, restricted ocular mobility, proptosis of both eyes (R>>L). All other anterior segment findings were normal. Fundus on dilated examination were normal. Hertel exophthalmometric measurements were 23 mm oculus dexter and 21 mm oculus sinister.



A CECT orbit was done and a Small, homogenous, mildly enhancing soft tissue density mass lesion was seen in supero-lateral aspect and in the extraconal region with eccentric proptosis. with a high clinical and imaging suspicion of lymphoma. The patient had a past history of Undergone surgery for BEP, but he

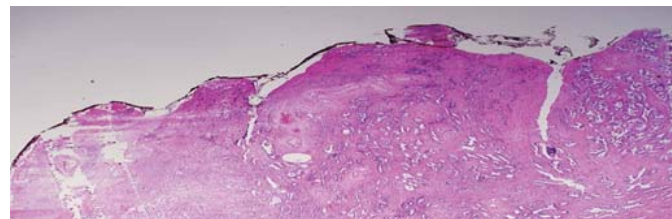


is still having problems during micturation. Prostrate specific antigen was found to be 9.51 which was significantly high (Normal being 0-4 ng/ml). Patient was refered to an oncologist. There was no enlargement of neck nodes. A Digital P/R was done .No rectal pathology was found. Prostate was firm to hard with

irregular margins, The chest X-Ray was normal.

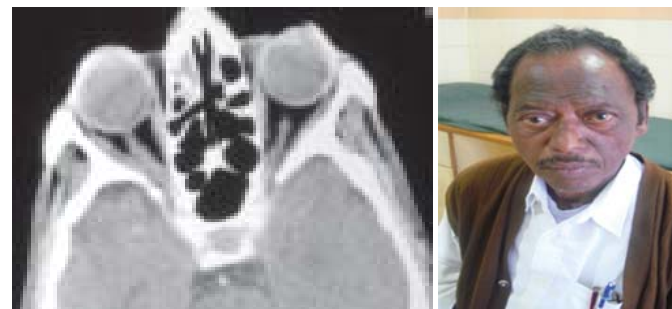
A USG of Abdomen and Pelvis was done which showed gross prostatomegaly with enlarged median lobe and heterogenous echotexture.

The patient was referred to haematology-oncology department for systemic work-up and treatment. A true cut prostrate biopsy was done revealing Adenocarcinoma- Gleason's grade 3a. The tissue still has recognizable glands, but the cells are darker. At high magnification, some of these cells have left the glands and are beginning to invade the surrounding tissue or having an infiltrative pattern. This corresponds to a



moderately differentiated carcinoma . The patient's lab findings (complete blood count, liver function test, lactate dehydrogenase) were normal. Thyroid function tests were normal.

The patient was subjected to treatment. TOTAL



ANDROGEN BLOCKADE was given which comprised of Oral Tabi (50 mg) OD daily for 2 months (Bicalutamide), Palliative Radiotherapy (3 CYCLES), Bilateral Orchidectomy.

-After 6 months, BCVA was 6/60 (OD) and 6/18 (OS). there was marked reduction in proptosis, decreased conjunctival congestion, PSA - 0.08 ng/ml. CECT orbit was done showing almost complete resolution of mass.

Discussion

1 Prostate cancer is the most common lethal malignancy affecting males in India. It spreads by direct local invasion, perineural invasion, or via the bloodstream and lymphatic system. Hematogenous spread occurs primarily to the bones. Distant visceral metastases are seen in the pelvic lymph nodes, liver and lungs. Involvement of skull convexity is frequent, but the skull base and orbits are less commonly affected. Metastases of prostate carcinoma to the orbit are rare. About 2% to 9% of all orbital neoplasms are metastatic lesions in nature. Breast, lung, lymphomas and leukemia are amongst the most common primary neoplasms known to metastasize to the orbit. Prostatic carcinoma can metastasize to the orbit by at least two routes: in patients with lung involvement, emboli can pass via the pulmonary circulation into the carotid arteries and subsequently into the ophthalmic artery. In the absence of pulmonary lesions, prostatic or vertebral lesions may seed into Batson's plexus, and reach cranial venous sinuses traveling up to ophthalmic and vortex veins. The clinical presentation of these orbital metastases are, in order of frequency, decreased visual acuity, ocular pain, proptosis, retinal detachment, presence of a mass, uveitis (masquerade syndrome) and secondary glaucoma, as well as osteoblastic lesions of the orbital wall.

References

1. Ahmad SM, Esmali B. Metastatic tumors of the orbit and ocular adnexa. *Curr Opin Ophthalmol* 2007;18:405-13
2. Gandhi HA, Shah MK. An unusual case of orbital metastasis from adenocarcinoma of prostate. *Hospital Physician* 2005;41:41-3
3. Green S, Som PM, Lavagnini PG. Bilateral Orbital Metastases from Prostate Carcinoma: Case Presentation and CT Findings. *AJNR Am J Neuroradiol* 1995;16:417-9.
4. Gonzalez CM, Kuzel T, Carter MA. Metastatic Adenocarcinoma of the Prostate to the Orbit As a Presenting Symptom. *J Urol* 1997;157:625
5. Baltogiannis D, Kalogeropoulos C, Ioachim E, Agnantis N, Psilas K, Giannakopoulos X. Orbital metastasis from prostatic carcinoma. *Urol Int* 2003;70:219-22.
6. Vissamsetti B, McArdle PA, Adams CJ, Hotiana Z, Morton AL, Alexander RJ. Proptosis - An Uncommon Presentation of Orbital Metastases Secondary to Prostate Cancer. *Urol Int* 2007;79:374-5
7. Autorino R, Zito A, Di Giacomo F, Cosentino L, Quarto G, Di Lorenzo G, et al. Orbital metastasis as a first indication of prostate cancer: a case report. *Arch Ital Urol Androl* 2005;77:109-10.
8. Batson OV. The function of the vertebral veins and their role in the spread of metastasis. 1940. *Clin Orthop Relat Res*. 1995;312:4-9.
9. Grönberg H. Prostate cancer epidemiology. *Lancet* 2003;361:859-64.