

## ***Editorial note***

### **Ophthalmic oncology in Nepal – an area requiring special attention**

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The prevalence of blindness due to cataract, corneal diseases, glaucoma and the increasing incidence of diabetic retinopathy and age-related macular degeneration in a developing country like Nepal help to divert the attention of the eye care stakeholders away from the ophthalmic oncological conditions. The malignant tumors of the eyelid and conjunctiva and intra-ocular tumors like retinoblastoma and melanoma are diagnosed late in the course of the disease and the treatment outcomes generally are poor.

The widespread network of eye hospitals in Nepal does not take care of those sight, eye and life-threatening oncological conditions, nor do many of the eye doctors trained have special interest in this field of ophthalmology. This may be explained by the lack of appropriate treatment facilities in the various ophthalmic centers, the view of the ophthalmic managers that oncology is a non-priority area, the lack of trained and skilled personnel and the socio-economical hurdles. The same reasons might be applicable to the delayed presentation of the patients with these conditions.

In the eastern part of Nepal, we see many cases of basal cell and sebaceous gland carcinoma of the eye lids (Thakur et al, 2003; Lavaju et al, 2009) that require an extensive surgical excision. Retinoblastoma presenting with proptosis (Badhu et al, 2005) and malignant melanoma with metastasis is not unusual.

Marshal et al (2013) have recently reported that a hepatic MRI can detect metastasis of uveal melanoma before the onset of symptoms. However, they have not confirmed whether this has any role in the prolongation of the life of the patient.

An excellent outcome after primary enucleation of unilateral low-risk retinoblastoma has been reported by Aerts et al (2013). This may not be applicable most of the time in our circumstances due to the delayed presentation of the disease. An ophthalmic oncology center in a country like ours must be equipped with adjuvant chemotherapy and radiotherapy for a better outcome of the disease.

The current research on management of retinoblastoma is focused on inhibition of proto-oncogene spleen tyrosine kinase (SYK) to induce death of the retinoblastoma cells (Zhang et al, 2012). This novel treatment modality may offer a relief from the problem of retinoblastoma in the near future.

In the context of advancement in diagnostic technology and treatment modalities for malignancy of the eye and its adnexa, there seems to be a lot of scope for improving the overall management of ophthalmic oncological cases in a developing nation. Training opportunities for the



potential specialists, improving diagnostic and therapeutic equipment and incorporation of the technology in practice are the areas for improvement. Establishment of an oncological referral center in a region can be advised to address the issues related to the diagnosis and treatment of malignant conditions of the eye and its adnexa.

### **References**

- Aerts I, Sastre-Garau X, Savignoni A et al (2013). Results of multicenter prospective study on the post-operative treatment of unilateral retinoblastoma after primary enucleation. *J Clin Oncol*; 13:1458-63.
- Badhu B, Sah SP, Thakur SK, et al (2005). Clinical presentation of retinoblastoma in eastern Nepal. *Clin Experiment Ophthalmol*; 33(4):386-9.
- Lavaju P, Arya SK, Sinha A, et al (2009). Pattern of ocular tumors in the eastern region of Nepal. *Nepal J Ophthalmol*;1(1):9-12.
- Thakur SK, Sah SP, Lakhey M, Badhu BP (2003). Primary malignant tumours of eye and adnexa in eastern Nepal. *Clin Experiment Ophthalmol*;31(5):415-7.
- Zhang J, Benavente CA, McEvoy J et al (2012). A novel retinoblastoma therapy from genomic and epigenetic analyses. *Nature* ; 481: 329-334.

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