



## Ocular Oncology Service in Nepal: A Demand with Time

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The incidence of cancer is on the rise worldwide and so is that of eye cancers specifically. The recent American Cancer Society—Survival, Epidemiology, and End Results (SEER) study has estimated 3,360 new cases of eye cancer in a population of 329 million. It was reported that the incidence of eye cancer in the UK has risen by 36% in the last decade. The gravity can be estimated by the fact that Retinoblastoma alone in India and China accounts for over half the cases reported globally each year (Manjandavida, Fairouz P, 2019).

Ocular oncology is a promising subspecialty dealing exclusively with intraocular and periocular premalignant, benign and malignant tumors and simulating lesions. The principal fields of expertise lie in the diagnosis and management of lid and adnexal tumors, orbital tumors, intraocular tumors, malignant melanomas, retinoblastoma and other metastases to the eye and orbit. All other subspecialties

like retina, cornea, neuro-ophthalmology and pediatric ophthalmology seek consultation with ocular oncologists and provide quality team care to such patients.

Eye tumors with their diverse clinical presentation have an equally diverse array of diagnostic and treatment modalities. While ocular oncology was in its initial stages of being established in the United States of America, Ocular tumors were rare entities often requiring enucleation. This gloomy globe sacrificing practice thus had little interest for many. . At that time, diagnostic challenges were steep, especially in the clinical recognition of various intraocular tumors as many clinicians were not familiar with wide-angle viewing with the indirect ophthalmoscope and fundus photography was in its infancy. Fluorescein angiography and ocular ultrasonography were thought to be in the process of development (Shields et al., 2015).

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The scenario has progressed much today for the better. There are globe and vision-salvaging methods now plaque brachytherapy for melanomas and external beam radiotherapy for certain cases of retinoblastomas. Other newer advances in ocular oncology include selective intra-arterial chemotherapy, intravitreal chemotherapy, neoadjuvant chemotherapy and endoresections (Abramson DH et al., 2008; Caminal JM et al., 2013). Looking back to the past in this service, we are proud of the enormous advancement in the field of ocular oncology over the past decades and most exceptionally in the past 10 years. A child that would have otherwise been left without an eye, will now likely have the globe retained possibly with reading visual potential. A father that might have lost his eye to a large melanoma in the past will now likely have detection of the tumor at a 2.0 mm stage for early new methods of treatment, we have reached favorable prognosis in many cases.

In Nepal, most of the ocular and periocular tumors are detected late and the prognosis is rendered poor. Most of the eye centers and eye hospitals in Nepal are not well equipped to optimally manage eye cancer patients. Moreover, many of the ophthalmologists do not have much interest in this field of ophthalmology. This is aggravated by the ophthalmic managers treating ocular oncology as a non-priority area dedicating less skilled personnel to it and overcoming its socio-economic hurdles (Badhu BP, 2013). Furthermore, other medical professionals have little knowledge and

awareness that ocular oncology is a separate subspecialty of ophthalmology. We do not have an exact registry of eye cancer nationwide but there is an increased tendency in the number of cases per year as early diagnosis and referral from other eye hospitals to the tertiary hospital has somehow improved where Oculoplastic and ocular oncology services are being started. So far there are only a few eye centers in the larger cities of the country where these services are available. It is utmost important to build a team of experts including medical oncologists, radiation oncologists, pathologists, ENT surgeons, neurosurgeons, and ocularists, the team itself being led by an ocular oncologist.

Thus, there is a dire need of experts in ocular oncology in Nepal training even more new Ophthalmologists to become experts in taking care of children and adults with eye and adnexal tumors. There should be more targeted training to empower such experts to engage in early detection, accurate diagnosis, logical decision-making, and medical and surgical management. An interactive academic session with a case discussion can be a powerful teaching tool. Surgical skills can be improved with hands-on training. It is our responsibility to establish ocular oncology centers in every tertiary eye center to serve the hundreds of citizens with aims to salvage lives so that all may live, to salvage globe and vision so that all may see.





## REFERENCES

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- Abramson DH, et al. (2008). A phase I/II study of direct intraarterial (ophthalmic artery) chemotherapy with melphalan for intraocular retinoblastoma initial results. *Ophthalmology*; 115: 1398–404.
- Badhu B (2013). Ophthalmic oncology in Nepal. *Nepal J Ophthalmol*; 5 (10): 145-6.
- Caminal JM, et al. (2013). Endoresection versus iodine-125 plaque brachytherapy for the treatment of choroidal melanoma. *Am J Ophthalmol*; 156: 334–42.
- Manjandavida, Fairouz P (2019). Ocular oncology sans borders—A global outreach. *Indian Journal of Ophthalmology*; 67(12): 1926-8.
- Shields J, Shields C (2015). Trends in the management of intraocular tumors over 40 years. *Indian Journal of Ophthalmology*; 63(2): 92.
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