Ocular oncology: navigating a rare, heterogeneous, and high-stakes field

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In the March 2025 issue of the Taiwan Journal of Ophthalmology, Arun D. Singh authored an editorial that presents a compelling overview of the current state of ocular oncology. The field is aptly described as "rare and amazing." Singh emphasizes that this subspecialty requires complex clinical judgment in managing extremely rare diseases, often marked by varied presentations and aggressive treatment strategies-including high-dose radiation, laser and cryotherapy for tumor destruction, localized and systemic chemotherapy, and surgical interventions ranging from limited excisions to enucleation. All of this takes place under the added pressure of preserving the patient's vision.

The editorial also underscores the notable progress the field has made: advances in radiation delivery, developments in brachytherapy, investigational targeted treatments, immunotherapy for surface eye tumors, and less invasive methods such as aqueous humor biopsy in retinoblastoma. It is a dynamic and specialized domain—evolving so rapidly that even the most current ophthalmologists may find it challenging to keep up.

Now, consider this context in relation to Brazil—a vast nation with marked disparities in healthcare access and limited availability of ocular oncology referral centers. How can a general ophthalmologist remain confident and well-informed when encountering rare presentations such as choroidal tumors or atypical conjunctival lesions?

Based on a recent estimate, the average general ophthalmologist in Brazil is likely to diagnose only one case of uveal melanoma throughout their entire professional life. This statistic helps clarify why many practitioners may feel unsure or hesitant when facing such cases. To address this gap, a practical initiative has emerged: Oncofone, a second-opinion service in ocular oncology offering free, confidential diagnostic and therapeutic support to ophthalmologists throughout Brazil.

The premise is straightforward but impactful: when a clinician encounters a suspicious ocular lesion, they submit an image along with clinical information. In response, a team of specialists provides guidance grounded in both robust clinical evidence and extensive experience across thousands of cases. This facilitates timely diagnosis and management, helping to alleviate patient distress.

Ideally, every patient would have immediate access to a highly trained ocular oncologist equipped with full diagnostic and treatment capabilities. However, that is not yet the reality for much of the Brazilian population. In the meantime, initiatives like Oncofone have played a vital role-linking general ophthalmologists with subspecialists and connecting distant areas to major treatment centers. As Professor Singh aptly notes, ocular oncology is a uniquely demanding field due to the rarity of its diseases, the limited availability of high-level evidence, and the use of aggressive treatments. For these reasons, it is essential that general ophthalmologists have access to the expertise of specialized colleagues when managing such cases.

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Article Reference of the Review: Singh AD. Ocular oncology: Rare and amazing.

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