Eyelid, Adnexal and Orbital Surgery in Small Animals: Practical Strategies to Avoid Common Complications

Dr. Michele Stengård, DVM
Diplomate, American College of Veterinary Ophthalmologists
Affiliate member, ECVO
Zürich, Switzerland

Surgical procedures involving the eyelids, adnexa, and orbit are routinely performed in small animal practice but remain associated with a range of preventable complications. Optimal outcomes depend on precise anatomical knowledge, meticulous surgical technique, and appropriate case selection. This presentation highlights common technical errors and provides practical guidance to improve surgical success in veterinary ophthalmology.

Entropion correction is among the most frequently performed ophthalmic surgeries. Undercorrection may occur when the initial incision is placed too far from the eyelid margin, whereas excessive tissue removal can result in overcorrection and secondary eyelid dysfunction. Accurate incision placement close to the lid margin, good stabilization of the eyelid during surgery, and precise tissue excision are critical for achieving appropriate eyelid conformation. In patients with elongated eyelids, adjunctive techniques such as wedge resections may be required to optimize functional outcomes.

Management of prolapsed gland of the third eyelid ("cherry eye") similarly requires careful attention to surgical detail. Failure to achieve proper conjunctiva-to-conjunctiva apposition in suturing or inadequate postoperative protection from self-trauma may result in recurrence. In cases involving marked gland hypertrophy, partial gland resection and biopsy may be considered. Temporary discontinuation of topical corticosteroids in the immediate postoperative period may facilitate fibrosis and improve gland retention.

Eyelid mass excision and traumatic eyelid laceration repair demand precise alignment of the eyelid margin to prevent long-term sequelae such as trichiasis, exposure keratopathy, or corneal ulceration. Margin-first closure techniques using fine suture material and layered reconstruction can help restore normal eyelid architecture. Selection of excision patterns should be based on lesion size and location to preserve eyelid function.

Temporary tarsorrhaphy is an important adjunctive procedure for corneal protection; however, incorrect suture placement or failure to use stents may lead to iatrogenic corneal injury. Appropriate landmark identification and regular postoperative monitoring are therefore essential. In orbital surgery, including enucleation, thorough removal of secretory tissue and careful hemostasis are required to reduce complications such as hemorrhage, implant extrusion, or contralateral vision loss.

Although complications cannot be completely eliminated, adherence to consistent surgical techniques, thoughtful perioperative management, and proactive complication prevention strategies can significantly improve outcomes in eyelid, adnexal, and orbital surgery in small animal patients.