Ventral Plate Stabilization Following Bilateral Rostral Mandibulectomy in Dogs: A Case Series. Ashley Schick, Fredrick Pike.
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Objective: To describe the clinical application, placement technique, complications, and results associated with the use of ventral plating following bilateral rostral mandibulectomy in dogs.

Study Design: Technique description and case series. Animals: Dogs (n = 5) that underwent bilateral rostral mandibulectomy procedures for tumor resection.

Methods: Medical records of animals undergoing bilateral rostral mandibulectomy were reviewed. Curvilinear skin incisions were made along the ventral mandible, and a polyaxial advanced locking plate system (PAX) was applied across midline in a transverse plane either before or after transection of the rostral mandible.

Results: Five dogs were included, all undergoing surgery for a malignant etiology. No intraoperative complications occurred. One dog developed a surgical site dehiscence 2 weeks postoperatively, and one developed an implant infection, requiring explant. All dogs had appropriate mandibular alignment following surgery with good postoperative function and quality of life based upon owner assessment outcomes. One dog was euthanized approximately one year following surgery for pulmonary metastasis.

Conclusions: Applying a ventral locking plate during bilateral rostral mandibulectomy is a feasible technique that results in decreased mandibular drift.

Clinical Relevance: Ventral plate stabilization for bilateral rostral mandibulectomy may result in improved prehension and mastication as well as improve patient comfort by reducing temporomandibular drift. Clinical application is not technically demanding and is associated with a relatively low complication rate.