**Procedure For Laryngeal Tie Forward Surgery.**

The laryngeal tie-forward is performed with the horse anesthetized and in dorsal recumbency. The principle of the procedure is to replace the action of the thyrohoideus muscles bilaterally by sutures placed between the thyroid cartilage and the basihyoid bone. The ventral cervical and intermandibular areas extending 10 cm rostral to the basihyoid bone are prepared aseptically. A ventral skin incision is made starting 1 cm caudal to the cricoid cartilage and extending 2 cm

rostral to the caudal aspect of the basihyoid bone. The sternohyoideus muscle is separated on the midline and bluntly dissected free of the dorsolateral aspect of the larynx lateral to the thyrohyoideus muscles. The sutures are first passed through the thyroid cartilage. A No. 5 USP polyblend suture (Fiberwire) is passed twice into the right lamina of the thyroid cartilage

ventral to the insertion of the sternothyroid tendon. Alternatively a metal buttress is placed on the medial side of the thyroid cartilage to minimize cutting of the thyroid cartilage with sutures. The junction of the basihyoid and lingual process is identified with a Crile forceps after limited

blunt dissection, and a wire passer is placed under the hyoid bone immediately lateral to the lingual process. The wire passer courses over the dorsal aspect of the basihyoid bone and exits on the midline at the caudal aspect of the basihyoid bone. After the needle has been cut, the dorsal (leader) suture and the ventral (trailer) suture of the contralateral side are passed into the wire passer and retrieved. The procedure is repeated on the other side such that the dorsal (leader) and ventral (trailer) sutures of each side can be tied over the ventral aspect of the basihyoid. A bilateral partial sternothyroidectomy is performed at this time. The sutures on each side are then tied so the rostral aspect of the thyroid cartilage is located immediately dorsal and 0.1 to 1.5 cm rostral to the caudal border of the basihyoid bone. Closure is obtained by reapposing the sternohyoideus muscles with No. 0 poliglecaprone (Monocryl, Ethicon) in a simplecontinuous pattern. The loose fascia overlying the larynx is incorporated into that closure; this is an important step to prevent postoperative seromas. The subcutaneous tissues and

skin are then closed in a routine manner.



Intraoperative view of the laryngeal tie-forward procedure,

after the sutures have been placed so that the dorsal suture (leader)

has been passed ipsilateral to the lingual process and the ventral (trailer)

end is passed on the contralateral side. Orientation: caudal *(bottom),*

rostral *(top).*