

Cervical Oesophagotomy

INDICATIONS : Oesophageal obstruction , perforating wounds of the oesophagus, stricture of oesophagus, neoplastic growth inside the oesophagus and in cases of oesophageal diverticulum.

Anatomy : Oesophagus is the connecting tube between the pharynx & stomach or rumen. The whole length of the oesophagus can be divided into cervical, thoracic and abdominal parts in horse and dogs. No abdominal part is present in cattle. From pharynx up to 4th cervical vertebrae it lies dorsal to trachea , from 4th cervical vertebrae to 3rd thoracic vertebrae it occupies the left position to trachea. It again becomes dorsal to the trachea from 3rd thoracic vertebrae. It enters the abdominal cavity through hiatus oesophagus in the diaphragm and terminates in the cardia of the stomach .The wall of the cervical part of the oesophagus is composed of fibrous sheath, tunica adventia, submucosa, whereas the thoracic and abdominal part is consist of serosa , muscularis, submucosa and mucosa from outside to inside.

Anaesthesia : Sedation with general anaesthesia in small animals , whereas sedation with local infiltration analgesia at the site of operation is preferred in large animals.

Control of Animal : Right lateral recumbency.

Operative Procedure : The animal is restrained in right lateral recumbency . A longitudinal incision is made on the cervical portion of the neck just above obstruction .The oesophagus can be approached either between the sternocephalicus muscle and trachea or between sternocephalicus and jugular vein in the jugular furrow. After incising skin subcutaneous tissue is separated. The fibers attached between sternocephalicus and jugular vein are also separated. The jugular vein, the left carotid artery and recurrent laryngeal nerve which lies lateral to the jugular are identified and are reflected on one side , so as not to cause any injury to these vital structures during surgery . The oesophagus is exposed and can be identified by the presence of foreign body. After exposing oesophagus attempt is made to push the obstructing mass cranially towards the pharynx, if possible. In case this attempt fails oesophagotomy is done. The oesophagus is lifted with the help of curved artery forceps up to the level of skin incision. The lumen of the oesophagus is then occluded with the help of tape or using rubber shod intestinal clamp on either side of the foreign body. The operation area around the oesophagus is

packed with sterilized gauze piece in order to avoid any contamination of surrounding structures from the contents of the oesophagus. If, the oesophagus appears normal above the obstruction the incision is made directly above the foreign body. But if, the wall of the oesophagus is too much congested above the obstruction but the tissue is viable, the longitudinal incision large enough to remove foreign body is made on the healthy portion of the oesophagus proximal or caudal to the foreign body. After giving incision on the oesophagus foreign body is removed from the lumen with the help of forceps. The forceps used to remove foreign body are discarded.

The oesophageal incision is repaired by suturing the mucous membrane with continuous connell suture or series of interrupted sutures with knots inside the lumen. Muscularis is sutured by using interrupted or cushion sutures, while applying second layer, surrounding fascia should be included in suture line to strengthen the suture line. Chromic cat gut No. 1/0 or silk is used as suture material. After suturing packing drapes are removed along with clamps and then oesophagus is checked for any leakage. After rinsing the oesophagus with normal saline, it is replaced back into its normal position and skin is sutured by placing series of interrupted or mattress sutures. This is followed by bandaging the wound after application of antibiotic powder and ointment.

Post Operative Care:

1. Animal is restricted to eat solid food for first 4-5 days after the operation, only milk or liquid diet is provided
2. I/V fluid therapy twice daily for 3-4 days or as per requirements.
3. Parental antibiotic for 5-7 days post operatively.
4. Daily dressing till removal of sutures.