Inta-operative management of the ventriculectomy procedure

A skin incision of 10cm long is made from the surface of the cricoid cartilage to beyond the junction of the thyroid cartilages.

The site can be located by two methods;

1. The triangular depression between the thyroid cartilages and the cricoid cartilages can be felt.
2. The central area of the skin incision by placing a horizontal line across the area where the rami of the mandible merge with the neck.

The skin incision exposes the mid line between the sternothyroideus muscles which are separated with scissors to expose the cricothyroid membranes. After initial separation with the scissors the muscles may be retracted digitally for the length of the skin incision. The cricothyroid membrane is cleared of adipose tissue and at this stage a small vein that is commonly present may be ligated. The cricothyroid membranes are then incised, commences with a stab incision to penetrate the laryngeal mucosa.

The incision is then extended longitudinally from the cricoid cartilage caudal to the junction of the thyroid cartilages cranially. The rings of the thyroid cartilage are retracted with a hobday’s roaring retractor.

The laryngeal ventricle is then identified by sliding the index finger cranial to the edge of the vocal cord and turning the finger lateral and downward toward the base of the ear to enter the ventricle. The laryngeal bur is passed into the ventricles as deeply as possible and twisted to grasp the mucosa. When the operator believes that the mucosa is engaged in the bur, the bur is then carefully withdrawn front he ventricles by everting the ventricles mucosa. At this point it is advisable to place a forceps on the everting mucosa to avoid tearing or slippage as the mucosa is fully retracted. The forceps are attached to the mucosa, the bur is untwisted and is removed and the ventricular saccule is completely everted using traction. With retraction maintained by the forceps the everted mucosa is then resected with scissors as close to the base as possible without damaging the associated cartilage. The laryngotomy incision is not sutured but left open because the respiratory tract cannot be prepared aseptically and contamination of the incision can occur with subsequent infection and abscessation as potential problems.