Pleural of t from NORFOLK VET PRODUCTS | especially for VETERINARY MEDICINE

for permanent pleural drainage

- the PleuralPort is a version of a vascular access port used as an alternative to a thoracostomy tube, eliminating the need for repeated entry into the pleural space.
- a fenestrated silicone drain is inserted through the thoracic wall into the pleural space and connected to a PleuralPort that is secured in place in the subcutaneous tissue.
- it is easily palpable through the skin and fluid is aspirated by inserting a non-coring Huber point needle into the port reservoir after aseptic skin prep.
- aspiration can be performed by owners, after instruction, as there is no need for sedation. This substantially reduces the stress on an animal which usually already has compromised respiration.

surgical suggestions serve only as an educational resource and should not replace your facilities protocols



Placement of the PleuralPort is performed under general anesthesia and controlled ventilation. The lateral thorax is clipped and prepared using aseptic technique.

A 5cm skin incision is made in the dorsal 3rd of the lateral thorax in the region of the 10th intercostal space. This is the location for the access port placement.

A stab incision is made in the 8th or 9th intercostal space in the middle third of the lateral thorax. This is the site where the fenestrated drainage catheter will be introduced into the pleural space.

A hemostat is passed subcutaneously from the dorsal incision to the stab incision and the thoracic drainage catheter is passed between the 2 incisions.

Placement of the Locking Loop/PigTail Catheter using a Guide Wire



The anesthetist pauses respiration under the direction of the operator as an 18ga over-the-needle catheter is inserted into the stab incision and into the pleural space. The needle is removed leaving the catheter in the pleural space and the 0.035" guide wire is passed into the thoracic cavity. Fluoroscopic guidance can be used to pass the guide wire to the proper location. Controlled respiration is resumed.

A peel-away sheath and dilator combination are passed over the guide wire and into the thoracic cavity. The dilator is removed. *Note: at this point, the chest cavity is effectively open to the atmosphere.*



photographs and surgery suggestions are courtesy of Drs. Culp, Berent and Weisse from Veterinary Image-Guided Interventions 2015.

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Once the dilator is removed, the drainage catheter is placed over the guide wire through the peel-away sheath and into the thoracic cavity. Once in position, with all fenestrations in the thoracic cavity, the guide wire can be removed, and the peelaway sheath peeled down and removed.

The external end of the drainage catheter is cut to length and attached to all the barbs of the connector pin of the access port. The blue boot is place over the connection to ensure a tight fit and limit the possibility of catheter kinking at the connection point. connector pin





After port and catheter are connected, port patency should be verified using a Huber point needle.





The port is placed in the subcutaneous pocket off to one side so that the septum of the port will not lie directly beneath the skin incision line.

The port is secured subcutaneously with non-absorbable sutures using all four suture holes around the perimeter of the access ports.



Port patency should be verified using a Huber point needle both prior to and after skin closure.

The skin incision is closed routinely as per your facility protocol.

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