

Canine Thoracic Duct Cannulation Revisited

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Introduction

The knowledge of the physiopathologic aspects of lymph in certain pathologic thoracic states has increased, resulting in more thoracic duct oriented operations. Participation of the thoracic duct in the treatment of many clinical disorders, trauma, obstruction, tumors, por-

tal hypertension, cirrhosis, pancreatitis, esophageal varices, immunologic depletion, biliary atresia, and diagnostic purposes (1) has furthered its reawakening. It has become timely to review the cannulation procedure of the canine thoracic duct.

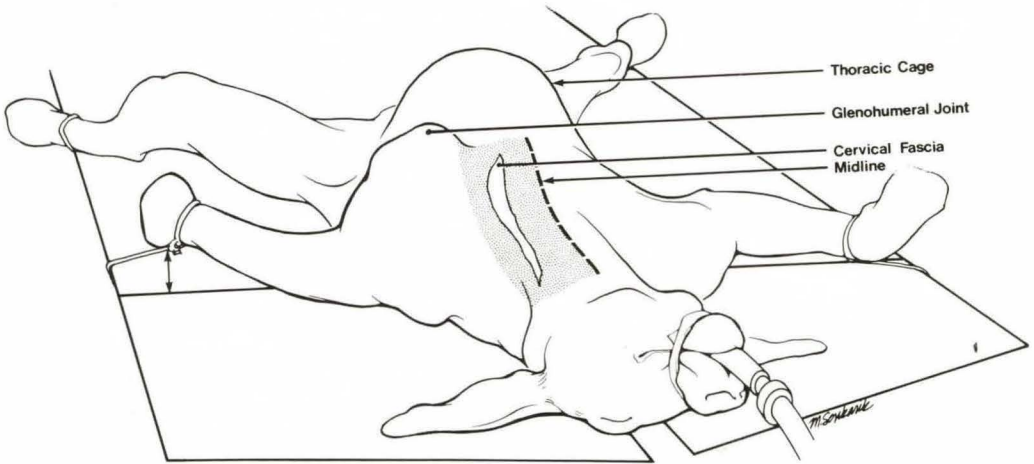


Fig. 1 Canines were placed in a supine position with the head extended and slightly turned to the right. All four legs were secured, while the front two were staggered to the right to allow greater tension on the thoracic inlet, cervical fascia and left subclavian vein. This method was found to achieve better results than allowing the head and neck to hang freely from the table (2).

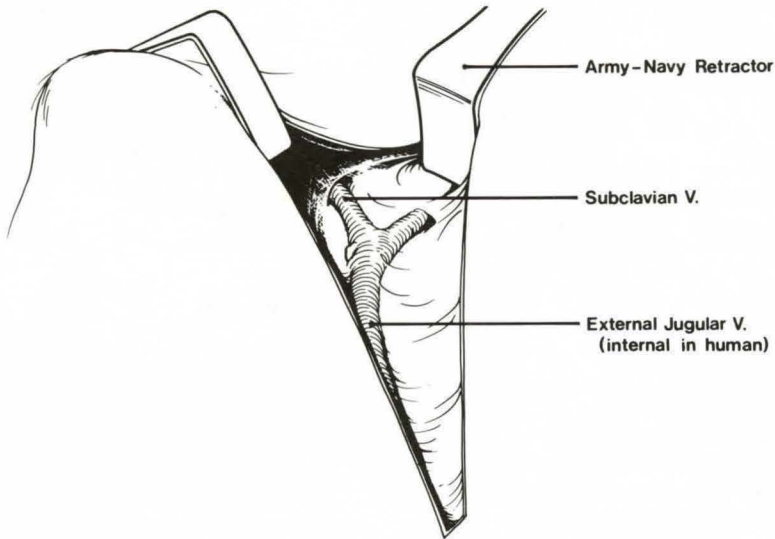


Fig. 2 The cervical fascia was exposed by making an off midline longitudinal incision, four to five cm, utilizing the glenohumeral joint as a reference. The external jugular vein was then gently dissected to its confluence with the left subclavian vein and retracted medially

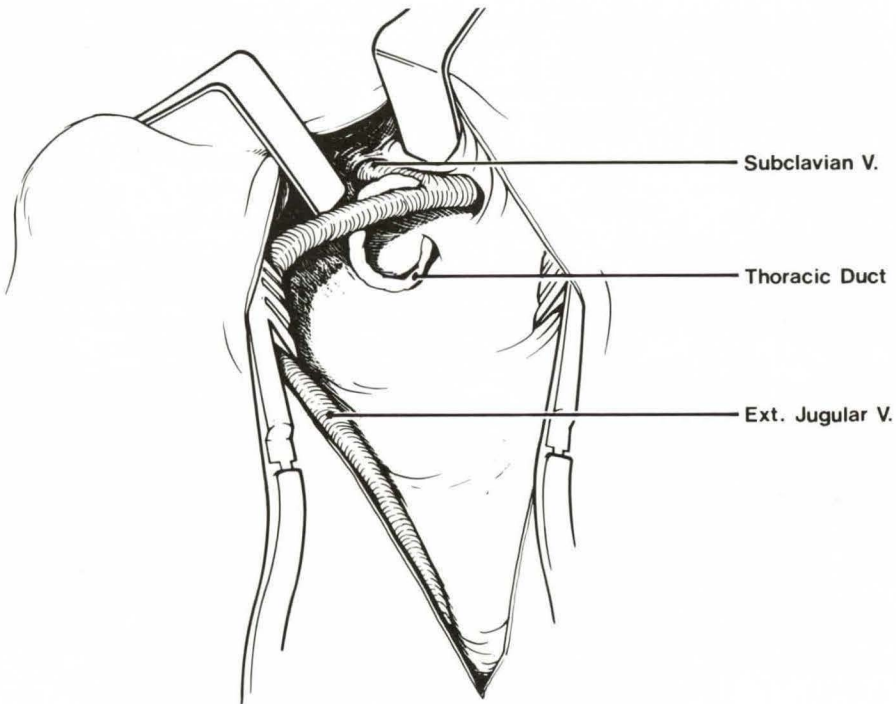


Fig. 3 The white appearing thoracic duct was exposed via blunt dissection and care taken to prevent rupture, reducing the possibility of collapse, which often leads to an unsuccessful cannulation (3). The thoracic duct was cleaned four to five cm distally to the superior mediastinum

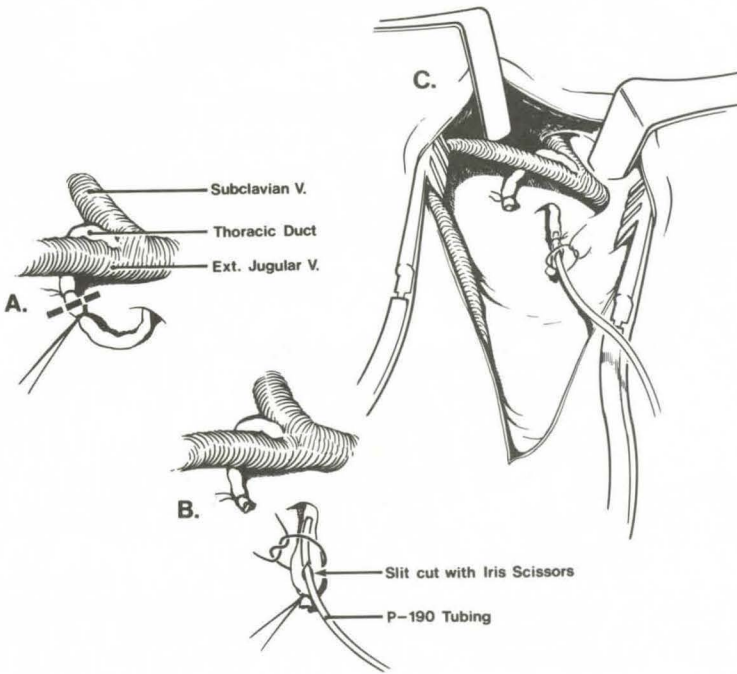


Fig. 4 One ligature was positioned proximally allowing the duct to balloon under pressure (A). Another ligature was applied nearby allowing passage of the iris scissors and duct severance (B). Applying gentle tension to the free duct and cautiously utilizing the iris scissors allows insertion of the P-190 tubing (B). Care was taken to honor the presence of one or more valves which must be traversed by twisting the catheter gently (3). Once the tubing was inserted three cm two ligatures were positioned to maintain stability (C).

References

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