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Proceeding

How to Simplify Chest Drainage with the Nasal Speculum?

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Abstract

The Chest tube drainage is a very commonly performed procedure in surgery. Insertion of a chest drain requires expertise to minimize complications. It is useful for teaching residents and also for your routine. This article describes a simple, easy, safe and feasible technique with a nasal speculum to perform the procedure.

Keywords: *Chest Tubes; Drainage; Pleural Effusion; Pneumothorax, Diagnosis; Speculum; Thoracic Surgery; Thoracostomy; Minimal Invasive Surgery*

Introduction

Pleural drainage was described more than 2500 years ago, since the time of Hippocrates. The use of a chest drain for the treatment of thoracic and postoperative diseases is frequent. In Brazil, by DATASUS, 37,520 thoracotomies with closed pleural drainage (code 0412040166) were performed in the SUS in 2017. The use of a chest drain is common in the medical environment. General, thoracic and cardiovascular surgeons do the insertion of the drains but the procedure requires skill, experience and competence to minimize complications, ranging from 9 to 30% with the traditional technique [1-7].

Goal

Disclose a simple technique for inserting the chest drain through a nasal speculum.

Method

Drain insertion is facilitated by the use of nasal speculum (Figure 1) as a mini-retractor in the intercostal space, available at any general hospital and can be done in any thoracic drainage. The technique has utility with local or general anesthesia, in the emergency or elective, in the postoperative of thoracic, cardiac or esophageal surgery.

Figure 1: *Nasal speculum and thoracic drainage.*

Unlike traditional drainage, sometimes blind and with the need for force to drain, this technique consists of introducing the nasal speculum with the opening parallel to the intercostal. The introduction of the drain through the created space is done without effort or resistance (Figure 2). As it has several sizes of specula, its use is not restricted to adults; it can also be used in children or obese.

Figure 1: *Nasal speculum and thoracic drainage.*

In addition to drainage, nasal speculum was useful for the introduction of optics in video assisted surgeries, for aspiration of pleural effusion and pleural biopsies. A video about the procedure is available on the link: http://www.youtube.com/ctorax.

Conclusion

The Nasal speculum as a mini-retractor in thoracic procedures is a simple, effective, low cost and safe instrument. Its use facilitates the insertion of the thoracic drain.

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