

# **RESEARCH ARTICLE**

## PRACTICES AND BELIEFS REGARDING THROAT PACK: A REVIEWON USAGE

### Dr. Vikas Gupta and Dr. Bipin Gupta

Manuscript Info	Abstract
•••••	•••••••••••••••••••••••••••••••••••••••
Manuscript History	
Received: 18 June 2022	
Final Accepted: 22 July 2022	
Published: August 2022	

Copy Right, IJAR, 2022,. All rights reserved.

#### Introduction:-

#### Kings College Hospital London, Dubai

Throat packs are commonly placed in the pharynx of patients undergoing general anaesthesia for oral surgical operations. The purpose of the pack is to prevent aspiration of blood and other surgical debris. If the pack is not removed before the tracheostomy tube or laryngeal mask, it can obstruct the airway. There is anecdotal evidence of complications from throat pack retention, but no records of the precautions taken to prevent these complications during the procedure's setup or takedown.

. . . . . . . . . . . . . . . . . .

Over time, additional authors have developed increasingly complex strategies to avoid retention. Leaving a portion of the pack visible from the mouth; tying or suturing the pack to the tracheal tube; placing reminder labels on the patient, the tracheal tube, or the anaesthesia machine (or all of these); utilizing specially-designed radio-opaque packs to aid later discovery; and documenting pack insertion on a dedicated checklist or as part of the surgical count 4-8 are some of these methods. John Snow once stated, "I never tolerate a cork or similar object being placed in a patient's mouth while unconscious unless it is securely attached to a cord, lest it be swallowed." Some of these techniques are quite similar to those of the past (1858). However, variables such as distractions, emergencies, personnel changes, the need for further airway packing, and surprisingly rapid recovery after extubation enhance the likelihood of pack retention.

Surgical throat packs are traditionally made from soft cotton or woven gauze, and have been used for centuries. Recent years have seen a rise in the use of polyurethane foam as a construction material. The purpose of using throat packs is to clear the airway, prevent the trachea and bronchi from becoming contaminated with debris or blood, and provide the surgeon unrestricted access [10]. In otolaryngological (ear, nose, and throat) procedures, proper packing is a precondition for anaesthetic success [11]. Despite the common belief that pharyngeal packing serves as a physical border to blood circulation into the trachea, it has been found that this is not always the case [12]. When doing oral surgery, it is important to take precautions to prevent the passage of blood that cannot be suctioned from draining into the stomach or trachea. Concerns about their availability have increased, and the topic comes up in conversation with the surgeon prior administering anaesthesia more often than before [13].

Inadvertently, le鞽 throat packing can lead to catastrophic events postopera璥vely following extuba璥on [6]. In one of the randomized controlled trial, done to access the u瓎iza璥on of throat pack in preven璥ngpostopera璥ve nausea and vomi璥ng, concluded the increased incidence of post sore throat and also noe標ect on PONV [7]

Unintended left throat packing has been associated with severe surgical complications following extubation [14]. In a randomised, controlled experiment [15] of the use of a throat pack to avoid PONV, an increased prevalence of preoperative throat infection and no effect on PONV were observed.

Researchers Conway et al. [16] discovered that after placing a moistened (water) pharyngeal pack in the throats of 1,480 individuals, a significant proportion (42%) suffered mild sore throat and 19% suffered extreme sore throat. In addition, a portion of the uvula was removed, the tongue was wounded, and teeth were shattered. The anesthesiologist and surgeon disagree on who is ultimately accountable for releasing the throat pack following surgery. [17]

Numerous studies have explored the distinctions and similarities between various pharyngeal packs. Researchers Marais et al. [18] discovered that pharyngeal gauze users were 38% less likely to develop post-operative sore throat than tampon consumers. Researchers reported no significant difference in the frequency of postoperative sore throat, dizziness, and vomiting between patients receiving dry and wet pharyngeal gauzes [19]. One author discovered that dipping esophageal packing in tenoxicam improved postoperative throat pain (NSAIDS) [20] by reducing inflammation.

auze is 38% compared with 15% of tampon group. In parallel to

this study, another study, comparing dry and wet pharyngeal

gauzes, there exist no statts  $\hat{\mathcal{R}}$  caldi  $\hat{\mathcal{R}}$  rence in the incidence rate

of sore throat, nausea and vomi璥ng following surgery [11].

In one study, the author found less incidence of throat

soreness a鞽er surgery, when esophageal packing was soaked

withtenoxicam (NSAIDS) [1auze is 38% compared with 15% of tampon group. In parallel tothis study, another study, comparing dry and wet pharyngealgauzes, there exist no sta谢s璥caldi標erence in the incidence rateof sore throat, nausea and vomi璥ng following surgery [11].In one study, the author found less incidence of throatsorenessa鞽er surgery, when esophageal packing was soakedwithtenoxicam (NSAIDS) [12]

The probability of significant airway blockage rises if the pack is left in place after extubation, and in 2012, a child in the Netherlands died after extubation because of a partial throat pack that remained in place. Various solutions have been suggested in the literature in an effort to decrease the risk of a patient keeping a throat pack. Crawford [15] recommended suspending a portion of the pack just outside the mouth as a memento. Others have recommended placing a label on the patient's forehead and suturing the pack in place [14]. If at all possible, every attempt should be taken to recover a lost oral pack. In addition, there are no clear criteria for when and how to utilise packing during regular nasal surgeries, despite its widespread application.

In an April 2009 safer practise advisory addressing the safe use of throat packs in clinical settings [11], the National Patent Safety Agency (NPSA) advocated employing both document-based and visual checks in throat packing every time, in addition to recording installation and removal. It is essential to keep note of whether the throat pack was inserted and removed [21], so appoint someone to record the timings on a white board. The circulation crew must document the pack in/pack out procedure on the surgery count sheet. Changes or modifications to the throat packs must be specified in detail and documented in the surgical count.

There are various guidelines [13] for the prevention of

reten璥on of the throat pack post-opera璥vely:

The clinical requirement of throat pack should be discussed

between the anaesthesiologist and surgeon, also the procedure

to prevent its reten璥on

Regulations [21] have been formulated to limit the possibility that the throat pack may be retained during surgery. The anesthesiologist and surgeon should examine the clinical requirement of a throat pack and the preventative measures necessary to prevent its retention.

The surgeon or anesthesiologist will verbally inform the surgical team of the choice to place a throat pack. Throughout the duration of the operation, a minimum of one visual inspection must be conducted. As the procedure complete, the surgeon and anesthesiologist should negotiate the removal of the pack verbally. To avoid inadvertently keeping a neck pack on, try these measures, which include "visual checks:" [21,22]

The surgeon or anesthesiologist who elected to use a tracheal pack is also responsible for securing it to the patient's artificial airway. The surgeon or anesthesiologist should place the pack to the patient's neck in such a way that one end protrudes from the patient's neck.

One person could be in charge of marking or labelling the patient.

Marking the anaesthetic equipment before insertion of the pack and again after removal of the pack. To distinguish between the appropriate site surgical mark and the throat pack mark, the label should contain the word "throat pack" in a clear and conspicuous manner.

As part of the "documented" method, a formal, two-person evaluation of pack placement and removal is advised [21-23]

A swab board or swab count can be utilised to monitor when a throat pack is applied or withdrawn. If the anesthesiologist or surgeon makes any modifications or changes to the placement of the throat pack, the paramedics in circulation must document them on the white board and surgical count record. In the post-operative area, the validation and complete disposal of the throat pack should occur.

According to British study [24], it is essential to clarify why a throat pack has been utilised. United Medical Protection Publication [25], an Australian organisation, and other sources show that effective measures to reduce the risk of imprisonment already exist, despite their limited application.

Utilizing a throat pack without justification endangers the patient's health. It is general knowledge that the mechanism for reporting incidents impacting patient safety suffers from underreporting.

In addition, the person who inserts the pack should take full liability for it, and throat packs should be removed as quickly as they are left on purpose, especially when transferring a patient in a critical care unit. Additionally, there should be organisational policies in place to prevent preservation of throat packs, such as the guidelines of the National Patient Safety Agency.

## **References:-**

1. Crawford BS. Prevention of retained throat pack (letter). BMJ 1977; ii:1029.

2. Najjar MF, Kimpson J. A method for preventing throat pack retention (letter). AnesthAnalg 1995; 80:208-9.

3. Burden RJ, Bliss A. Residual throat pack – a further method of prevention (letter). Anaesthesia 1997; 52:806.

4. Vickery IM, Burton GW. Throat packs for surgery. An improveddesign based on anatomical measurements. Anaesthesia1977;32: 565–72.

5. Green R, Akester J. A combined oropharyngeal airway anddental pack. Anaesthesia1981;36: 889-91.

6. Lincourt AE, Harrell A, Cristiano J, Sechrist C, Kercher K, Heni-ford BT. Retained foreign bodies after surgery.Journal of Sur-gical Research2006;138: 170–4.

7. Hariharan D, Lobo DN. Retained surgical sponges, needles and instruments. Annals of Royal College of Surgeons of England 2013;95:87–92.

8. Stone JP, Collyer J. Aide-memoir to pharyngeal pack removal. Anesthesia and Analgesia2003; 96: 304.

9. Snow J. On chloroform and other anesthetics: their action and administration. Reprinted.British Journal of Anaesthesia1958; 30: 247–52.

Atkinson RS, LEE JA (1977) A synopsis of anaesthesia, 8th Edn,

John Wright & Sons.

977) Throat packs for surgery.

Anaesthesia 32: 5

endoscopies. In; Frey R, Hugin W, Mayrhofer O. eds. Textbook of

anesthesiology and resuscita 璇on, Springer Verlag, Berlin, pp:

766-772.

10. Atkinson RS, LEE JA (1977) A synopsis of anaesthesia, 8th Edn, John Wright & Sons.

11. Gray TC, Nunn JF, Utting JE (1980) General Anaesthesia, 4th Edn, Gray TC, p: 1656.

12. Vickery IM, Burton GW (1977) Throat packs for surgery. Anaesthesia 32: 565-572.

13. Krwuscher H (1971) Anesthesia in otorhinolaryngology and endoscopies. In; Frey R, Hugin W, Mayrhofer

O. eds. Textbook of anesthesiology and resuscita<sup>1</sup>/<sub>2</sub> on, Springer Verlag, Berlin, pp: 766-772.

14. To EW, Tsang WM, Yiu F, Chan M (2001) A missing throat pack. Anaesthesia 56: 383-384.

15. Crawford BS (1977) Prevention of retained throat pack. Br Med J2: 1029.

16. Conway CM, Miller JS, Sugden FL (1960) Sore throat after anaesthesia. Br J Anaesth 32: 219-223.

17. Bisase B, Matthews NS, Lan C (2011) Current pracrace and opinions regarding the use of oropharyngeal throat packs in the United Kingdom. J PartentSaf 7: 162-164

18. Marais J, Presco徑 RJ (1993) Throat pain and pharyngeal packing: A controlled randomized double-blind comparison between gauze and tampons. ClinOtolaryngol Allied Sci 18: 426-429.

19. Fennessy BG, Mannion S, Kinsella JB, O'Sullivan P (2011) The benefits of hypopharyngeal packing Iran J Med Sci 180: 181-183.

20. Elhakim M, Siam A, Rashed I, Hamdy MH (2000) Topical tenoxicamfrom pharyngeal pack reduces postopera 豫ve sore throat. ActaAnaesthesiolScand 44: 733-736

21.National Patent Safety Agency (2009) Safer practice notice. Reducing the risks of retained throat packs after surgery.

22.https://doclibraryrcht.cornwall.nhs.uk/DocumentsLibrary/RoyalCornwallHospitalsTrust/Clinical/Anaesthetics/Us eOfThroatPacksInTheatres.pdf

23. Worcestershire Acute Hospitals NHS Trust (2014) Policy for reducing the risk of nasopharyngeal pack retention after surgery. Accessed from: <u>http://www.worcsacute.nhs.uk</u>

24. Knepil GJ, Blackburn CW (2008) Retained throat packs: Results of a national survey and the application of an organisational accident model. Br J Oral MaxillofacSurg 46: 473-476.

25. Alders H (2007) Case study: Retained throat packs. United Medical News.