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ENTCase

AN OVERLOOKED FOREIGN BODY INSIDE TRACHEOTOMY STOMA

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Özet

TRAKEOTOMİ STOMASINDA UNUTULAN YABANCI CİSİM

Trakeotomi açılması, çok eski çağlardan beri, hava yolu patolojilerinde uygulanan cerrahi bir işlemdir. Günümüzde bile %5-40 oranında komplikasyonlar görülebilmektedir. Ancak, trakeotomili hastaların hava yolundaki yabancı cisimler ile ilgili bilgiler çok sınırlıdır. Literatürde belirtilen yabancı cisimler, sıklıkla hasta tarafından aspire edilmiş olanlardır. Burada sunulan hastada ise perioperatif süreçte kanama nedeniyle stomaya gazlı bez yerleştirilmiş ve sonrasında bir ay boyunca orada unutulmuştur. Böylece yazarlar konuyla ilgili bilgilerin güncellenmesini ve per/postoperatif dikkat edilmesi gereken noktaların yeniden hatırlatılmasını amaçlamışlardır.

Anahtar kelimeler: trakeotomi, yabancı cisim, yara enfeksiyonu, trakeotomi bakımı, trakeotomi komplikasyonları

Abstract

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Tracheotomy has been commonly performed, due to airway pathologies, since ancient times. Still, complications can be encountered in 5-40% of cases. However foreign bodies, in the airway passage of tracheotomy patients, are very rarely mentioned in the literature. The mostly written cases in the literature considers the aspiration of the materials by the patient, but we present a case in which, the foreign body was a long piece of gauze, left inside the passage, peroperatively,and overlooked afterwards. Writers aimed to underscore this rare complication, to focus on the importance of per/postoperative care in tracheotomy procedure, once again.

Keywords: tracheotomy, foreign body, wound infection, tracheotomy care, tracheotomy complications

Introduction

Tracheotomy is a common procedure performed for nearly 3000 years, for the management of both upper and lower airway pathologies [1,2]. Complications due to this procedure are seen in 5-40% of the cases and, are classified into three groups as intra-operative, early postoperative and late postoperative [1,2]. Foreign material aspiration by the tracheotomy patients, were described in the literature previously [3]. However gauze dressing left in the stoma is an unusual complication. We present a 70 years old patient with a purulent malodor stomal infection due to gauze dressing left in the tracheotomy stoma for a month. We aimed to review the literature and attract the attention to tracheotomy care, once again.

Case Report

A 70 years old women visited our clinic with neck pain and erythema. She was referred to our clinic by a pulmonary disease doctor and learned that tracheotomy was performed in another clinic due to prolonged

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entubation for cardiac reasons a month ago. It was learned that bleeding occured during the procedure due to the anticoagulant medications (Plavix (Clopidogrel, Bristol Myers Squibb&Sanofi, NYC,USA&Gentilly, France), Asprin (Acetylsalicylic Acid, Bayer, Leverkusen, Germany)). After staying in coronary intensive care unit (CICU) for 4 days, she had been transported to the inpatient service. She had stayed there for a week and was discharged.

When she visited our clinic, she had hyperemia, and sensitivity in the tracheotomy stoma with a purulent malodor discharge. A thorough examination of the area revealed a 4 cm long gauze inside the stoma. Silk stay suture on the right side of the tracheotomy cannula was also still present (Figure 1-2).

Figure 1
Forgotten gauze inside the stoma, and the left side silk stay suture.

Figure 2
A piece of 4 cm long gauze removed from the airway passage.

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Silk sutures were encased with small abscess. Gauze inside the stoma and the silk suture were removed, the wound was cleaned and appropriate dressing was applied. Also medical treatment was prescribed. She was invited to the clinic every other day until the wound infection was improved (Figure 3).

Figure 3
Stomal appereance after 10 days follow-up.

Two weeks later , the stomal infection regressed and endoscopic evaluation of the tracheal lumen was performed, neither grannulation tissue formation, nor airway obstruction was observed. She was decannulated, a month later (Figure 4). She had no further complains.

Figure 4
Decannulation, one month follow-up. Note that stoma was completely closed.

Informed consent was obtained from the patient.

Discussion

The most common complication of tracheotomy is hemorrhage [1,2,4]. Intraoperative hemorrhage incidence increases with various conditions like patients anticoagulant therapies, systemic disorders, surgical technique.etc [4]. After detailed patient history, it was learned that during the procedure, bleeding was excessive and the authors realised that the gauze forced inside the stoma was for the bleeding control. It was overlooked, afterwards.

Tracheotomy patients commonly have co-morbid diseases and they are usually under anticoagulant therapies.Though hemorrhage is a well known complication, cautious surgery may avoid exessive bleeding, despite anticoagulation. Besides, absorbable hemostatic agents like 'Surgicel' or 'Spongostan'(Ethicon, Johnson&Johnson, Edinburgh, Scotland) may be of use, if bleeding control is necessary.These substances are well absorbed and do not cause infection.

Tracheotomy patients are at increased risk for wound infections for many reasons. The skin barrier is lost. There is overhydration of the peristomal area, because of the permanent exposure of the skin to pulmonary secretions. Additionally the skin inflammation due to the surgery and the irritating effects of the tracheotomy tubes further increase the skin breakdown [5]. Meticulous dressing changes and wound care, minimize moisture- associated or device-related skin damage. Especially if using gauze dressing, it is suggested to change dressing every 8 hours [5]. An overlooked piece of gauze inside the stoma and sutures left in place more than necessary are far worse. Precautions also facilitate patients' close observation to avoid unexpected, unpleasant conditions like this.

Another very important issue is that, these overlooked foreign bodies may narrow the airway passage causing more than infections, such as scar tissues, leading temporary or permanent airway obstructions. This case was evaluated endoscopically, and no grannulation tissue or airway obstruciton was detected. Hence, decannulation was considered afterwards.

Conclusion

Thorough literature search was made, and to our knowledge, foreign bodies in tracheotomy patients are commonly seen, due to aspiration. In this case a foreign body was overlooked inside the stoma for a month. Thus, this case is the rarest of the rare.

Great awareness is necessary in both peroperative and postoperative period for this procedure. Surgical experience or patient preoperative preparation- if possible- are obviously substantial, however, the nursery staff and the patient awareness are also other key points. Postoperative follow-up and regular tracheotomy care are crucial for preventing the complications (especially wound complications) as much as possible. All the health care providers and patients' care givers should be well-educated and well-trained.

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