

Tooth anchorage for endotracheal tube stabilization

Ancoragem dental para estabilização do tubo endotraqueal

Anclaje dental para la estabilización del tubo endotraqueal

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ABSTRACT

Safe stabilization of the anaesthetic tube is essential for the successful performance of any surgical procedure under general anaesthesia. In the area of oral and maxillofacial surgery, this stability is even more critical, as the cephalic segment can be manipulated, which requires greater stability. We

describe a simple technique for anchoring the orotracheal tube to the canine or pre-molar teeth, using cotton suture. This technique is safe, fast, allows mobility and makes use of material that is readily available in any surgical theater.

Keywords: general anesthesia, oro-tracheal anesthetic tube, tooth.

RESUMO

Estabilização segura do tubo de anestesia é fundamental para o bom desempenho de qualquer procedimento sob anestesia geral. Na área da cirurgia bucomaxilofacial essa estabilidade é ainda mais crítica, pois o segmento cefálico pode ser manipulado, o que exige maior estabilidade. Descrevemos técnica simples de ancoragem do tubo orotraqueal no dente canino ou nos pré-molares, feito com fio de sutura de algodão. técnica essa segura, rápida, permite mobilidade e faz uso de material facilmente disponível em qualquer ambiente cirúrgico.

Palavras-chave: anestesia geral, tubo anestésico orotraqueal, dente.

RESUMEN

La estabilización segura del tubo anestésico es esencial para el éxito de cualquier intervención bajo anestesia general. En el ámbito de la cirugía oral y maxilofacial, esta estabilidad es aún más crítica, ya que se puede manipular el segmento cefálico, lo que requiere una mayor estabilidad. Describimos una técnica sencilla para anclar el tubo orotraqueal a los dientes caninos o premolares, utilizando sutura de algodón. Esta técnica es segura, rápida, permite movilidad y hace uso de material fácilmente disponible en cualquier entorno quirúrgico.

Palabras clave: anestesia general, tubo de anestesia orotraqueal, diente.

INTRODUCTION

Procedures under anesthesia are part of the general dentist's routine, but general anesthesia is not. Its indication is re-

stricted to patients who are special in some way or due to the size of the surgery, which requires control only achieved by intubating the patient¹.

Securing of endotracheal tube is essential for the safety of surgeries under general anesthesia or even for patients who for some reason need to be guaranteed airway maintenance, either in the emergency room or intensive care units²

In oral and maxillofacial surgery, the stability of the anesthesia tube becomes even more critical, as the patient's head may need to be moved and repositioned. This increases the risk of tube displacement and consequent loss of the anesthesia pathway.

Traditionally the use of adhesive tape or stringing with cotton ties are described, the use of other devices, especially the routine of the oral surgeon, such as steel wires, maxillo-mandibular locking screws, orthodontic brackets are also used, especially in patients with burns on the skin of the face, which make it impossible to use adhesive tape³. These techniques require specific equipment or even resources that are not available in a hospital emergency care unit, especially in public services.

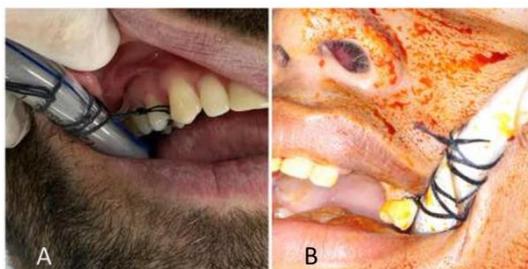
TECHNIQUE

We use dental anchorage, especially in canines or bicuspid, which are looped with 2-0 cotton thread (Figure 1 A,B). These teeth have excellent alveolar bone anchorage and usually stabilize safely the endotracheal tube. This technique has been shown to be safe, fast, easy to perform, and uses common suture thread found in the operating room. In cases requiring intraoperative occlusal checking, we chose to use the nasotracheal way if possible (except in

patients with middle third fractures) or the orotracheal submental route⁴.

This dental anchorage is part of the oral and maxillofacial surgery group's surgical routine and is preferred to and replaces anchorage with adhesive tape on the skin. The main advantage, in our opinion, is freedom of movement, safety of intubation and control of local antisepsis.

Figure 1A,B - Show the anchoring of the orotracheal tube in the Upper bicuspid teeth



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