TYPES OF SUTURES IN ORAL SURGERY

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Abstract

Aim: In everyday surgical practice, different types of suturing materials are available. They play an important role in tissue healing, facilitate the process of haemostasis, enable the reconstruction and reunification of tissue whose integrity has been compromised during surgery or trauma. The aim of this study is to examine the reaction of the tissue to different suturing materials, as well as to determine the speed of wound healing and the incidence of complications after their use, in order to prove which of them is most suitable for oral surgery procedure.

Material and methods: These researches were done based on analyzes presented on "MEDLINE" and "PubMed" databases, from 1970 to 2018, using the following keywords: oral surgery, suture materials, flap, periodontium, polyglucapron, polytetrafluoroethylene, polyglycolic acid, polylactic acid, silk.

Results: Tissue reactions to suturing materials vary depending on the surface properties and the adhesion properties of the bacteria to the material. Silk is the most commonly used suturing material in oral surgery. The application of silk sutures increases the risk of infections, because they react with the connective tissue, allowing the accumulation of dental plaque and bacterial adhesion around them. Studies about tissue response to suturing material confirm the presence of inflammation when using silk and cotton threads, and minimal reaction in others (nylon, polyester, polytetrafluoroethylene (ePTFE), polyglycolic acid (PGA).

Conclusion: In addition to the observance of surgical suturing techniques, and the proper maintenance of oral hygiene in the postoperative period, the choice of suturing material has a

significant impact on tissue healing. This underscores the need for careful selection of suturing material during oral surgery.

Key words: oral-surgical interventions, suturing material, resorbable and non-resorbable sutures.