

POSTEXTRACTIONALY COMPLICATIONS BETWEEN MINOR AND MAJOR

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ABSTRACT

Wounds remaining after dental extraction are not large in extent, not tension high and important sacrifices of tissues and however they may be accompanied with various pathological events with a rapid onset - a few hours after surgery, clinical manifestations being dominated by local phenomena. Oedema, pain, infection, hematoma, bruising and lockjaw are most frequently encountered. Their high incidence would recommend them as a major participant in the panel deviated from the normal of postoperative course, requiring the establishment of a therapeutic arsenal to reduce complex clinical phenomena. Paradoxically, however, with one located at the opposite effect, at least, after extraction alveolar alveolitis is one that should attract the attention of prevention measures across practitioner. If unfortunately this has occurred, it needs a complex therapy - surgery and drug-consuming time and money with a slow evolution (healing may take up to 30 days of treatment and monitoring) and a negative impact on patient comfort after dental extraction.

Key words: dental extraction, alveolar wound healing, alveolar osteitis, dry socket, postoperative healing

INTRODUCTION

The care of post-extraction wound in dento-alveolar surgery were known widely recognized and still are known from contemporary authors. Most of authors accuse the failure of alveolar wound healing with the neglecting of post-extractionally advises on the one hand and on the other hand in haste and superficiality regarding monitoring postoperative course [2, 5]. Although methods of prevention of complications after dental extraction are a reality, unfortunately it still falls into the error of neglecting missed multiple aspects of these events [1, 6]. It is considered defended and justified his stance by the explanation that complications after extraction is a known issue, he minimizes the

fact that, unfortunately, they can be installed just in patients and in situations that would argue otherwise [7]. Complications after dental extraction are due to local factors and general factors. Their peculiarity lies in the fact that the practitioner should immediately resort to take determined action to solve them, minimizing their neglect or worse, and thus harm the development of postoperative patient comfort [4].

Oral surgeon must know the risk involved by the manoeuvres that must be performed in patients, trivial in this case dental extraction, along with methods of prevention and control of postoperative complications that may occur [8]. Individualization is the premise for a successful therapy. Most researchers have

been concerned with this issue in the occurrence of complications after dental extraction accusing ignorance regarding patient specificity, using unexpected techniques, invasive and non-compliance by the patient's of indications after extraction. Iatrogenic causes of complications after dental extraction may be [3]: set default superficial history and detection of systemic diseases omission; lack of conduct for various systemic diseases; poor choice of timing of surgery; misuse of loco-regional anaesthesia; inadequate surgical technique, invasive; lack of post-operative instructions specify.

MATERIAL AND METHODS

Our study included a group composed of 24.865 patients in the Ambulatory of Oral and Maxillofacial Surgery Iasi, between 01/01/2008 to 01/12/2010. Of the 24 865 patients to see and treat, at 10.478 patients there were performed dental extractions (42.14%) (Fig. 1).

In the 10,478 patients who were consulted and to whom we have practiced dental extractions, the main pathological conditions which prompted the indication of extraction were: scrap root: 3534 patients (33.72%), acute congestive pericoronaritis: 567 patients (5.41%), acute pulp lesions: 1328 patients (12.67%), pulp gangrene: 1571 patients (14.99%), chronic marginal periodontitis: 2209 patients (21.08%), chronic pericoronaritis: 548

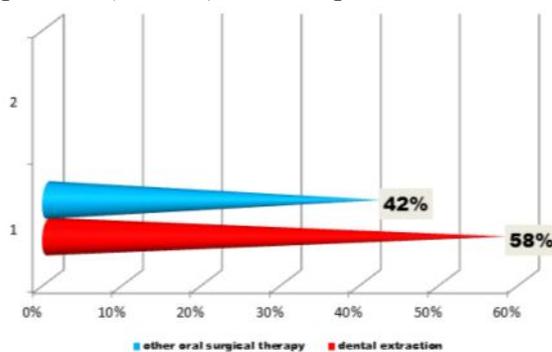


Fig. 1. Patient's distribution according to surgical therapy

patients (5.23%), chronic periapical lesions: 492 patients (4.69%), acute apical periodontitis (std. I / II): 229 patients (2.18%) (Fig. 2).

During manoeuvres related to tooth extraction, operators can produce some crashes which create difficulties in conducting intervention or may become the cause of postoperative complications. Because morphological features of the teeth and anatomical neighbourhood reports are extremely varied, these accidents occur and sometimes are dramatic complications after extraction. Our intention was to determinate the rate of complications after extraction, so we studied the clinical and statistical variable. In the group of 10,478 patients that we practiced dental extractions, 8002 patients (77.47%) were not accused of postoperative complications, the remaining 22,63% (2476 patients) of our statistical analysis revealed the presence of complications after extraction (Fig. 3).

The hierarchy of complications after dental extraction to those recorded in 2476 patients was dominated by (Fig. 4):

- alveolar osteitis : 57 patients (2.3%)
- lasting anaesthesia: 15 patients (0.6%)
- abscesses and necrotizing soft parts: 27 patients (1.09%)
- haemorrhage: 43 patients (1.73%)
- lockjaw: 187 patients (7.55%)
- postoperative discomfort (pain, swelling and postoperative): 2147 patients (86.41%)

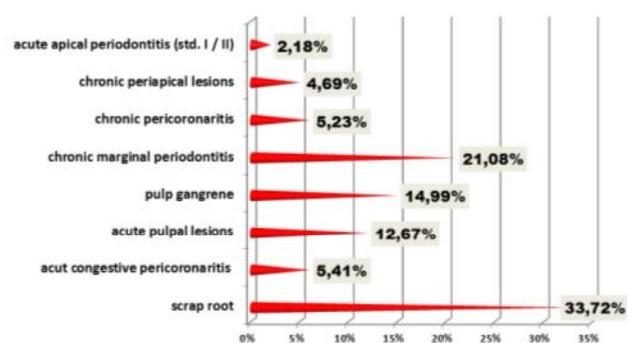


Fig. 2. Patient's distribution according to oral pathology which dictates dental extraction

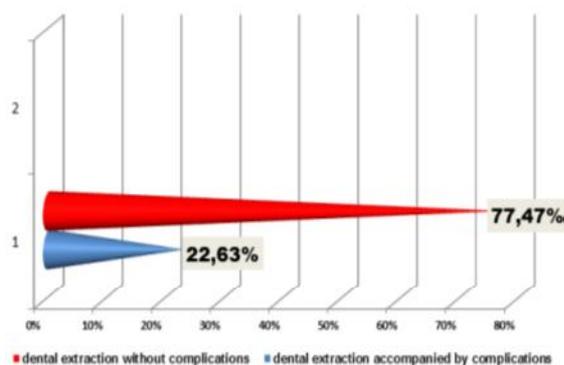


Fig. 3. Patient's distribution according to incidence of complications

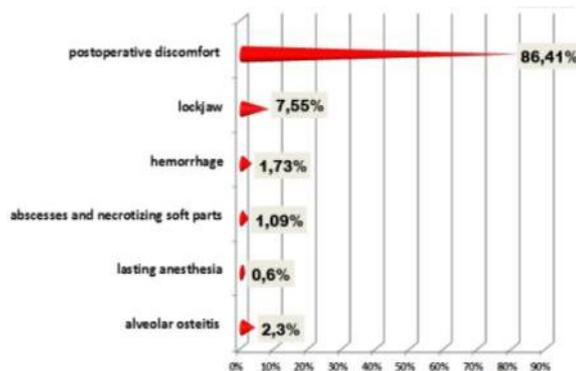


Fig. 4. Patient's distribution according to type of complications

The intention of our research was to demonstrate the clinical value of the complications recorded extraction rates, objectivised on post-operative progress of patients in the study.

This study protocol followed the recording of patients' postoperative evolution, translated by remission of clinical phenomena proper to each type of complication installed, at seven days postoperatively.

RESULTS AND DISCUSSIONS

For the majority of patients a tooth extraction seems quick and easy manoeuvre, but for general dental practitioners and oral surgeons well informed, knowledgeable, tooth extraction is a complex surgical procedure that carries risks of local and / or general and therefore require an important set

of precautions and practical knowledge.

Dental extraction requiring a very good manual, proper technique, ensuring the safe and aseptic field and related to a patient fully and rigorously investigated in terms of general and local conditions, often leaves some aspects to escape surgical control such as complications after extraction.

To achieve maximum results suggestiveness in order to determine the clinical incidence of complications after extraction detected statistical our applications we have limited the group of patients who have registered minimum values vs. maximum:

- alveolitis: 57 patients (2.3%)
- postoperative discomfort (pain, swelling and postoperative): 2147 patients (86.41%) (Fig. 5)

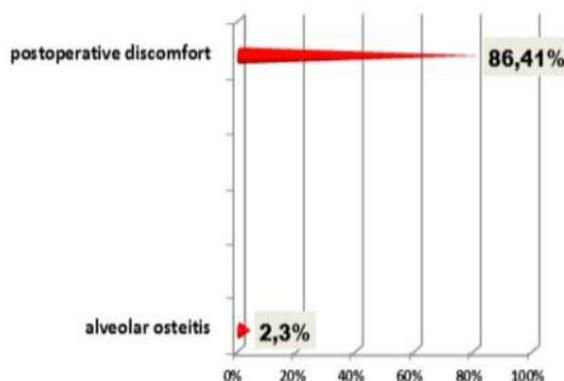


Fig. 5. Patient's distribution according to incidence of minor or major complications

		Minim	Maxim
CHANCE			
CHANCE REPORT OR (cross product)	1.392	0.972	1.994 (T)
CHANCE REPORT OR (MLE)	1.391	0.971	1.996 (M)
		0.956	2.027 (F)
RISK			
RISK REPORT RR (RR)	1.158	0.987	1.358 (T)
RISK DIFERENCES (RD)	8.146	-0.659	16.951 (T)
(T=Taylor series; C=Cornfield; M=Mid-P; F=Fisher Exact)			

Table 1. Chance and risk reports

In order to determine the ratio of chance and hazard ratio in the production of complications after dental extraction, we conducted contingency table incidence of complications after extraction argument occurred (Table 1).

Analysis of risk indexes difference detected for each complication after dental extraction statistically confirmed their positions.

In other words, the risk of a patient to develop an alveolar osteitis (OR risk index - 0.65) versus swelling and pain (OR -16.5 risk index) is much smaller.

- At first sight it would seem that the picture of complications after dental extraction, postoperative discomfort, swelling and pain translated deserves attention, justified by the high percentage actually awarded.
- Paradoxically, after extraction, alveolitis due procession of clinical manifestations that define it, although it registered a small percentage, most often dramatically alter the patient's comfort, not immediately, but for a longer period of time requiring a number of curative measures, consuming time and money.

Such recordings made at 7 days after surgery, we come to certify the above assertions:

- alveolitis: 46 patients (1.85%)
- postoperative discomfort (pain, swelling and postoperative): Absent (Fig. 6)

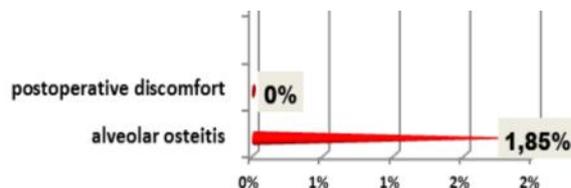


Fig. 6. Patient's distribution according to incidence of complications recorded at 7 days after dental extraction

In other words, this small percentage awarded to alveolitis incidence is only

mathematical expression and not its importance in the clinical picture of complications after dental extraction,

The subject *Dental extraction vs Complications* is a complex reality to be seen and approached from several angles:

- multifactorial aetiology in which the central axis is the knowledge of risk factors.
- invasiveness of surgery. Most times the human factor, that the practitioner is the main modulator of this aspect of surgery.
- most important landmarks are entitled to motivate the dentist and dental surgeon to spare no effort to deal properly with maximum precautions tooth extraction are: specificity of oro-maxillo-facial regions, exacerbated the risk of bacteraemia due oral microbial and increased risk and severity of alveolitis after extraction.
- failure to establish a boundary iatrogenic versus multifactorial disease with intrinsic mechanism fully elucidated, should not however justify ignorance or minimize serious known issues, plain and prevention being imperative.

CONCLUSIONS

Wounds remaining after dental extraction are not large in extent, not tension high and important sacrifices of tissues and however they may be accompanied with various pathological events with a rapid onset - a few hours after surgery, clinical manifestations being dominated by local phenomena. Oedema, pain, infection, hematoma, bruising and lockjaw are most frequently encountered. Their high incidence would recommend them as a major participant in the panel deviated from the normal of postoperative course, requiring the establishment of a therapeutic arsenal to reduce complex clinical phenomena. Paradoxically, however, with one located at the opposite effect, at least,

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