Patient safety & Dentistry

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One of the most controversial aspects of medical/dental treatment is the ability to cause disabilities and discomforts.

(Thomas 2000)

In every complex organization the mistake and the possibility of an incident cannot be eliminated.

Dentistry is a complex system due to different variables:

- Specificity of the single patients;
- Intervention complexity;
- Multiple professional experiences;
- Various managerial models.
A New Mentality

Considers the mistake as a source of learning in order to avoid to fall again in those situation that lead to mistakes.

It's a winning strategy to learn and not to hide from mistakes.
A gross error occurred when treatment planning a guided surgery case.

This case history illustrates how a mistake, when manufacturing the radiographic guide, can duplicate itself when placing the implants through the surgical template. This led to a disastrous aesthetic result. This case history also illustrates yet another reason for constructing a provisional restoration in the first instance before proceeding to the final restoration using a titanium substructure or bonded bridgework.


Analysis of detection of dental prescribing errors at primary health care units in Brazil.

Mendonça et al considered dental prescribing errors as a potential area for improvement in the medication management process and patient safety. It is suggested that a pharmacist should be available for medication dispensing at all units and that dentists are trained continuously so that medication orders may become more legible and complete.

Improving the quality of dental prescriptions is suggested to reduce the risks for medication errors and will promote the rational use of pharmacotherapy, and patient safety.


Evaluation of radiographic errors made by undergraduate students in periapical radiography

In an analysis concerning the radiographic errors of undergraduate students, it was observed that 1,089 radiographs (64.06 %) were acceptable, and 611 radiographs (35.94 %) were unacceptable. A statistically significant difference was found (p < 0.001) for the frequency of errors types according to anatomical locations. The most frequent error was incorrect orientation. And the most frequent anatomical location was the maxillary molar area.

It was suggested that determination of the distribution of anatomical region and error types could help to eliminate these errors and radiographic relays.


Implant failure: attempting procedures beyond skill level

Soloiman T lists attempting procedures beyond skill level as another important factor for implant failure.


It is obvious that such circumstances have significant consequences for patient safety and economic loss.

Dental implants in the periodontal patient

In the dental field patients with a history of periodontitis are considered to represent a unique group of individuals who previously succumbed to a bacterial challenge, and thus the management and survival rate of implants in these patients is highlighted as important concern.


Errors in orthognathic surgery planning: the effect of inaccurate study model orientation

The results of orthognathic surgery may differ significantly from the planned outcome using dental models. Analysis showed that the misalignment of the maxillary model introduces errors in the planning, which may lead to the incorrect surgical positioning of the maxilla reported in the literature. The results of the mathematical analysis were validated by image analysis of photographs of mounted maxillary models, used to simulate maxillary forward and upward movement and planned maxillary forward and downward movement.

Planning for maxillary forward and upward movement produced more advancement and only 50% of maxillary impaction. Planning for maxillary forward and downward movement produced less advancement and more inferior displacement in relation to horizontal and vertical reference planes.

Risk management in endodontics

The aim of this study was to categorize and review errors, complications related to endodontic treatment, and legal actions against practitioners. A total of 232 complaints were analyzed, including 52 complaints (22.4%) that were found to be unjustified and 200 complaints (87.6%) that were judged as not justified. Most of the treatment errors occurred during the intraoperative phase. In lower anterior teeth and in cases involving more than 1 tooth, significantly more errors were found during instrumentation and root canal filling (P < 0.05). There was a similar distribution of procedural errors and of negative outcomes for teeth with elective endodontic treatment and teeth with endodontic treatment as a result of a pathologic process.

**CONCLUSIONS:** The technical skills of the operator, the distribution of operator errors and of negative outcomes during treatment, and teeth with endodontic procedures that resulted in legal review errors, complications related to treatment as a result of a pathologic process, and teeth with endodontic treatment are judged as not justified. All possible technical complications should be considered and explained to the patient before treatment.


**BACKGROUND:** Diseases which involve the oral cavity usually derive their names from either Greek or Latin. These terms are customarily based on etiology or description of the lesion. However, because of various reasons, some of these terms are misnomers. MI (misnomers). To review commonly encountered misnomers in oral pathology.

**OBJECTIVE:** To analyze and elucidate the nature of these terms, with emphasis on etymological explanations are used to analyze and elucidate the nature of these misnomers. Alternative terms, where possible, have been suggested.

**MISNOMERS IN ORAL PATHOLOGY.**

Further, the danger of trans-infection of blood-borne diseases is evident and dental practitioners require improvement. All dental practitioners need to assess the risks of cross infection after dental extraction.


**PROCEDURAL ERRORS DURING ROOT CANAL PREPARATION USING ROTARY NiTi INSTRUMENTS DETECTED BY PERIAPICAL RADIOGRAPHY AND A CONE BEAM COMPUTED TOMOGRAPHY.**

Thiobulsky detected procedural errors created by rotary NiTi instruments during root canal preparation by two imaging methods: the Periapical Original Ray System rewarded to shape the canals and then they were filled using AH Plus sealer and gutta percha. Periapical radiographs (PR) and cone beam computed tomography (CBCT) images were obtained and two examiners evaluated them to verify the occurrence of procedural errors (fractured instruments, perforations, and canal transportation). There were no significant differences (p > 0.05) between the imaging methods. In view of the low incidence of procedural errors during root canal preparation performed by students, the introduction of rotary NiTi instruments has potential in undergraduate teaching. PR and CBCT permitted the detection of procedural errors, but the CBCT images offer more recourse in undergraduate teaching.

De Alenoar AH, Dummer PM, O’veira HC, Pedora JD, Estre C. Simul Healthc. 2011 Feb 25. [Epub ahead of print].

**REFERENCE:**

**PREVIOUS STUDY:** The ProTaper Universal Rotary System was used to shape the canals and then they were filled using AH Plus sealer and gutta percha. Periapical radiographs (PR) and cone beam computed tomography (CBCT) images were obtained and two examiners evaluated them to verify the occurrence of procedural errors (fractured instruments, perforations, and canal transportation). There were no significant differences (p > 0.05) between the imaging methods. In view of the low incidence of procedural errors during root canal preparation performed by students, the introduction of rotary NiTi instruments has potential in undergraduate teaching. PR and CBCT permitted the detection of procedural errors, but the CBCT images offer more recourse in undergraduate teaching.

De Alenoar AH, Dummer PM, O’veira HC, Pedora JD, Estre C. Simul Healthc. 2011 Feb 25. [Epub ahead of print].
Perianesthetic dental injuries: analysis of incident reports.


Gival N, Gershtansky Y, Halamish-Shani T, Taicher S, difficult intubation. associated with a pre-event prediction of 70 years. In most cases dental injury is not judged to be pathological in 32% of the teeth were the upper incisors. Dentition was determined from the patient’s claim/dentist's diagnosis. The evaluation of rehabilitation plan constructed by the surgery consultants to the company. Maxillofacial surgeon (GN) and anesthesiologist (ES), reviewed the reports. Of 40 hospitals that report to the MRM Co. as part of the professional liability insurance, during the years 1992-1999, 18 hospitals reported dental injury. A total of 1999 incidents were reviewed. A total of 86% of the incidents resulted in legal action. They chose the cases of oral and head and neck cancer that practitioners the authors present a series of medicolegal cases to highlight dental professionals' potential legal liability and provide examples. Oral and head and neck cancer are highly significant malignancies that have resulted in legal actions. The records of 61 patients (39 women and 22 men) were retrospectively evaluated for dentistry. Risk management aspects of implant dentistry. Givol N, Taicher S, Halomish-Shahi T, Chaushu G. Int J Oral Maxillofac Implants. 2002 Mar-Apr;17(2):258-62.


The impact of work and professional standards on professional burnout among Dutch dentists. Of the working Dutch dentists, 73% showed no burnout, 26% showed emotional exhaustion, 2% showed depersonalization, and 2% showed low personal accomplishment. Gorter RC, Albrecht G, Hoogstraten J, Eikman MA. Oral Epidemiol. 1999 Apr;27(2):109-16.
FDI goals

Member support
To promote the interests of the member associations and their members

Information Transfer
To advance and promote the ethics, art, science and practice of dentistry

Patient safety & Risk management

A United Nations Environmental Programme; Mercury issue
2.1.3.1 UNEP INC 1 meeting (June 2010)
FDI-DPC project

WHO Patient Safety Curriculum Guide for Medical Schools
The 1st edition - early 2009

WHO Multiprofessional Patient Safety Curriculum Guide for Health Professionals
The 2nd edition - June 2011
Risk management strategies have a central role to play in reducing failures, improving health outcomes, ensuring a high quality of clinical care and most importantly enshrining patient safety into daily clinical practice. As risk management is multifactorial and multi-professional in nature, it is essential that organized dentistry and individual dental professionals acknowledge their responsibility to integrate risk management strategies and practice into oral health care systems and collaborative dental practice.

World Health Organization (WHO) describes patient safety as ‘a relatively new discipline aiming to reduce harm to patients caused by health care and to identify opportunities to improve the health outcomes and to reduce harm’. As patients can be harmed by health care, it is considered to be important for all health professions to address the problem of patient safety and establish systems to improve safety. While patient safety has always been an important issue for health professions, it is now becoming a central element of health policy and practice, with strong support from governments, health professionals and lay people alike. As a result, health system planners are placing more emphasis on the provision of safe and quality care, implement new measures to ensure patient safety and reduce errors, and with health professionals are expected to have greater knowledge in the field of patient safety.
Would you agree that more and more emphasis is placed on the issue of ‘Patient Safety & Risk Management’ within the health arena in recent years?

- Yes: 38
- No: 2
- No knowledge: 0

Do you agree that there is a need for dental practitioners to become more familiar with and be more knowledgeable on the topic of ‘Patient Safety & Risk Management’?

- Yes: 40
- No: 0
- No knowledge: 0

Would you agree that FDI can provide information and knowledge to dental practitioners regarding ‘Patient Safety & Risk Management’?

- Yes: 36
- No: 3
- No knowledge: 2
Would you support an FDI-developed 'Patient Safety Manual For Dental Practice'? 

- No knowledge: 2
- No: 2
- Yes: 36

Which of the following topics would you consider to be included in the 'Patient Safety Manual For Dental Practice'?

- Essential elements of patient care and quality assurance: 29
- Drugs and patient safety: 32
- Legal aspects of patient safety: 32
- Ethical aspects of patient safety: 32
- Learning from errors: 24
- Risk management: 21
- Why patient safety is important: 31
- Definition of patient safety &...

Others:
- Education to the patient
- Universal laws/regulations regarding Patient Safety
- Patient Privacy and confidentiality
- Ergonomics, Clinical design (electrical socket, waterline, recommended clearance for dental equipment, recommended life of instruments and equipment), Safety of Dental Materials
- Investigation and evidence regarding patient safety promotion
- Patient proof office design
- Dental records
- Radiation protection
MAY 2008 - Council of European Dentists (CED) RESOLUTION - PATIENT SAFETY

Reduction of adverse events and improvement of patient safety is most effectively achieved through prevention, and preventive action to reduce adverse events is in turn a facet of high quality healthcare. Quality cannot be promoted through force or sanctions from outside.

The dental profession seeks to promote quality in many ways, including providing for continuing professional development to keep skills up to date; establishing local study groups for dentists and dental practices to learn from each others' experiences; developing systems for reporting adverse events or near misses; and ensuring compliance with infection control and waste management laws. Much of this is implemented already in Member States, although action to improve patient safety is an ongoing preoccupation.

DENTIST-PATIENT RELATIONSHIP

But a trustful one..
Thank you...
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