

To what extent are esthetic dental procedures acceptable according to the principle of "*Primum non nocere*"?

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Summary

Esthetic dental procedures are performed not on medical reasons but with cosmetic purposes at all. Are they acceptable according to the principle of *Primum non nocere*, and to what extent? To answer this question, an anonymous inquiry was carried out among 69 Bulgarian dentists. The results showed that the esthetic dental procedures were acceptable and worth being performed more than half of the inquired dentists answered positively to the questions.

Key words: esthetic dentistry, acceptability, *Primum non nocere*.

Summary

Introduction

A lot of dental procedures are performed not on medical reasons, but with cosmetic purposes. Patients do not have biological, physical and/or psychological reasons present for therapy, only esthetic problems [1-10]. For example, replacement of good, functional bridges/crowns with metallo-ceramic etc. are such type of procedures. These procedures are accompanied by additional loss of tooth structure and/or possible damage of tooth vitality. The first principle of medicine is *Primum non nocere*. Are the esthetic dental procedures acceptable according to this principle, and to what extent?

The purpose of this study is to answer this question establishing the opinion of dentists.

Material and methods

We used the method of anonymous inquiry among randomly selected Bulgarian dentists. 69 dentists 43 female and 26 male were included in the study. Their average number of years of experience was 20 years. 5 of the inquired dentists had no dental specialty, 45 of them had one specialty and 19 had more than one.

The main part of the questionnaire form consisted of 17 questions about the most popular esthetic procedures. The acceptability of the procedures was evaluated by figures, ranging from 1 to 6. Answers, ranging from 1 to 3 meant unacceptable procedure and answers, ranging from 4 to 6 were considered as acceptable procedure. The results were calculated according to the statistics, using the alternative analysis.

QUESTIONNAIRE FORM

Dear colleagues,
The purpose of the inquiry is to establish your opinion to what extent the esthetic dental procedures are acceptable according to the first principle in medicine *Primum non nocere*!
Please answer the questions underlining the correct answer or writing it:

1. You are: 1/male 2/female
2. Your working experience isyears.
3. You are dentist with: 1/ one specialty 2/ more than one specialty 3/ without specialty

Considering that the first principle in medicine is *PRIMUM NON NOCERE* and that the patient does not have any medical reasons for therapy but only cosmetic ones, please evaluate the following procedures by figures from 1 to 6. Answer 1 means absolutely unacceptable, and answer 6 *Primum non nocere* absolutely acceptable procedure. The higher figure means a more acceptable procedure.

1. Diastema closure -

2. Veneer correction with direct resin -
3. Veneer correction with porcelain -
4. Replacement of amalgam filling with direct resin -
5. Replacement of amalgam filling with ceramic inlay/onlay -
6. Replacement of amalgam filling with metal-ceramic crown -
7. Bleaching of colored teeth by in-office procedures -
8. Bleaching of colored teeth by out-of-office procedures -
9. Endodontic treatment of colored teeth, followed by bleaching -
10. Recontouring of gingival tissue for esthetic reasons -
11. Ridge augmentation for esthetic reasons -
12. Orthodontic treatment for elderly -
13. Orthodontic treatment for children -
14. Surgical correction of Class III malocclusions -
15. Orthognatic surgery -
16. Replacement of missing maxillary lateral incisor by implant -
17. Replacement of missing maxillary lateral incisor by cantilever bridge on a maxillary canine -

THANK YOU FOR YOUR PARTICIPATION!

Results

According to the answers of the inquired dentists, we classified the esthetic procedures in 6 groups:

1. Procedures approved by less than half of the dentists, i.e. the most part of the dentists answered that these procedures were more harmful than useful:
 - Replacement of amalgam fillings with composite materials only 42% of the dentists approved the procedures.
 - Endodontic treatment of colored teeth, followed by bleaching 43% of the dentists answer positively.
2. Procedures approved by up to 60% of the dentists:
 - 51% of the inquired dentists supported the diastema closure with composite.
 - 55% of the dentists said YES to the bleaching of colored teeth by out-the-office procedures.

- 51% of them said YES to the replacement of missing lateral incisor with a cantilever bridge on a maxillary canine.
3. Procedures approved by up to 70% of the dentists:
 - Replacement of amalgam fillings with ceramic inlays, onlays or crowns was supported by 64% of the inquired dentists.
 - Correction of veneers by porcelain inlays was supported by 62% of the dentists.
 - Replacement of bridges with metal-ceramic ones was positively appraised by 61% of the dentists.
 4. Procedures approved by up to 80% of the inquired dentists:
 - Orthodontic treatment for elderly was an acceptable procedure for 78% of the dentists.
 - Surgical correction of orthodontic abnormalities and orthognatic surgery were approved by 76% of the dentists.
 5. Procedures approved by up to 90% of the dentists:
 - 84% of the inquired dentists said YES to the correction of veneers by composite materials.
 - 81% of the dentists approved the bleaching of colored teeth by in-office procedures.
 - 86% of the dentists appreciated positively the recontouring of gingival tissue and ridge augmentation for esthetic reasons.
 6. Procedures approved by up to 100% of the inquired dentists, i.e. procedures that almost all dentists accepted as worth being done:
 - Orthodontic treatment for children 100% of the inquired dentists said YES, that these procedures were useful.
 - 90% of the dentists justified the replacement of missing maxillary lateral incisor by implant.

Conclusions

The results of the study showed that the most part of inquired dentists considered the esthetic dental procedures worth being performed. Despite possible risks, esthetic dentistry is acceptable and approved part of dental practice.

Because of the small number of dentists included in the study, we cannot trigger general conclusions and the results should be discussed as results from a pilot-study.

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