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RESTORATION OF THE UPPER FRONTAL TEETH WITH VENEERS

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Abstract

The objective of this study was to determine the incidence of dental veneers from the total of dental aesthetic rehabilitation in a private dental office.

Key words: veneers, aesthetics, diastema.

INTRODUCTION

Classical dental medicine is focused on oral hygiene, prevention, diagnosis and treatment of oral complaints. Dental aesthetics offers the opportunity to embellish the look of smile and mouth, with a major impact on self-esteem and implicitly on the quality of life. An important part of dental aesthetics is channeled on reconstructive treatments that allow the tooth to be restored.

Among the options of dental aesthetics are numbered: teeth whitening teeth color obturation, orthodontic treatment, bridges, crowns and dentures, dental veneers, dental implant, etc.

The veneers are ceramic or composite plates that are cemented on the surface of each tooth.

The veneer restoration is a process through which are dimmed certain teeth problems, such as lack of chromatic uniformity, enamel wear or even teeth spacing. Nicked teeth or diastema can be repaired, aesthetically with the help of dental veneers.

MATERIAL AND METHODS

We conducted a study on 406 patients, presented to the Dental Net practice in the period 01.2014-08.2017. Of the total of 406 patients, 153

solicited veneers(37.68%), but after the professional consult the veneers have been done at 97 patients (23.89%).

The age of the patients to whom has been done the veneers was between 17-51 years, most of them were women (male / female ratio was 1.6: 1) and came from the urban environment (urban / rural ratio was 7.1: 1) (Table 1).

Table 1

Characteristics of the batch

Parameter	**Value**
Women/Men	61,86%/ 38,14%
Average age	38,16±7,5/ 3 years
Urban/Rural	87,62%/ 12,37%

Modalities to realize. There are two ways to achieve the veneers: either directly at the dental office or indirectly with the help of the dental laboratory.

The direct way is done in the practice and is applicable only to composite materials.

The veneer is done in the office, by hand, by the specialist doctor, without the help of the lab and the dental technician. This implies a lot of skill and proficiency from the dentist because he has to equalize or even surpass the aesthetic result obtained by the indirect way.

In the indirect method, the dentist collaborates with the technician of the dental technique laboratory to obtain the dental veneers.

The process involves taking the dental impression and using CAD-CAM computerized software so that in the end the bevels to fit perfectly to the patient.

This method is most commonly used in case of the ceramic veneers (feldspatica, Emax, Lumineers) or zirconium.

The professional consult has a defining role in choosing the teeth that will be receiving a veneer, but also the material that matches the patient's teeth.

The electivity of dental veneer depends entirely on the particular situation of the teeth, the aesthetic problem that the patient wishes to be solved, but also on the budget allocated by the patient. Each of the materials used in the veneer restoration have certain properties (opacity, strength, etc.) which differentiate them and which may or may not be compatible with the teeth to be beveled.

RESULTS AND DISCUSSIONS

Dental veneer is used when the patient has the following problems at one or more teeth from the frontal area:

- spaces, diastema
- angular fractures in the enamel and teeth cracks
- discolorations due to endodontic treatments, medications or fluorosis

Advantages of dental veneers:

- dental veneers can successfully replace the visible face of a single tooth and don't differ in appearance from natural teeth.
- biocompatibility - materials used in the dental beveling don't interact with the gum, which leads to obtaining a perfect appearance of the connection between the gum and the tooth.
- teeth shouldn't be devitalized - over 90% of the treatments are performed without devitalizing the teeth.
- Dental veneers are resistant over time, their strength being given both by the materials used, by the way they are applied and the adhesive with which are applied.
- precision in realization - In the case of zirconium or ceramic dental bevels, precision is in the order of microns. The way in which the marginal sealing of the polished tooth is performed with the dental veneer is very important.
- dental unit - all teeth have the same color and shape, being able to correct both the color differences and the position or shape of the pointed teeth.
- dental veneers are stain resistant, their surface being glossy, not allowing pigments to adhere to it.

Disadvantages of dental veneers:

- dental veneers can't be repaired
- the price of dental veneers - although their price kept decreasing, is still remains pretty high
- can't be applied to any tooth –is not indicated the application of dental veneer to teeth with massive caries, and can't be applied in case of untreated periodontal diseases and massive gingival retractions.

Table 2

Distribution of cases according to teeth affectations

Affectation	**Nr.**	**%**
Spaces, diastema	34	35,05
Formal abnormalities	23	23,71
Discolorations due to endodontic treatments, medications or fluorosis	40	41,24

In our study, most patients experienced discolorations (90.72%), spaces were registered at 7.22%, and fractures and fissures were 2.06%.

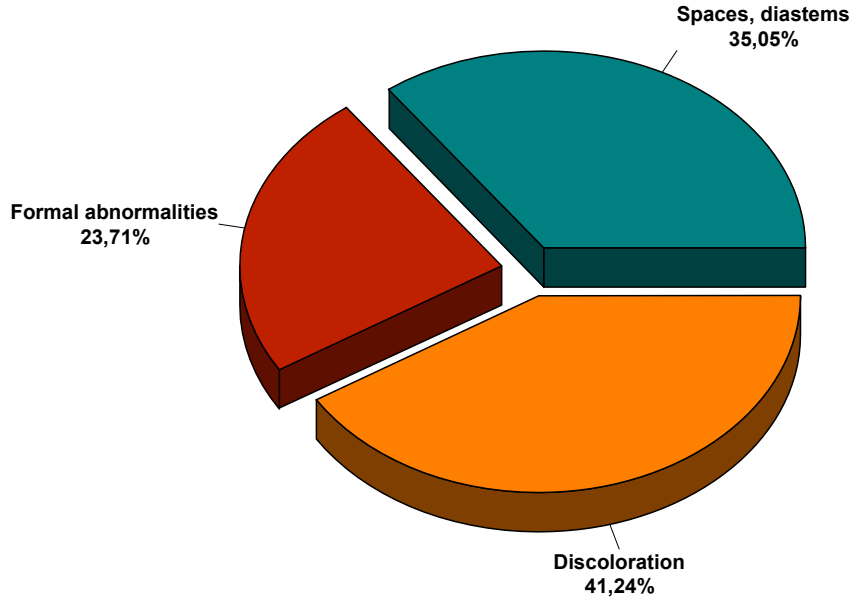


Fig..1. Distribution of cases depending on the type of dental affection

The diastema is the space between the front teeth is treated by dentists as a mild affection, which has only aesthetic consequences and can be permanently eliminated. The main cause of diastema is a slight discrepancy between the size of the maxillary bone and the one of the teeth. The space between the teeth may also appear due to missing teeth, genetic inheritance, small teeth.

Fig.. 2. Formal abnormality

Fig.. 3. Discoloration

Formal dental abnormalities occur when disturbances of the odontogenesis process take place in the morphodifferentiation phase. In terms of etiopathogenesis, the main incriminated factors are endocrine diseases, congenital syphilis, infections, traumas, irradiation and heredity.

Dental discoloration is a change in the physiological color of dental structures, and the factors that determine it can be: nutritional deficiencies, such as vitamins D and C; tetracycline medication; fluoride excess, resulting in dental fluorosis; genetic diseases: amelogenesisimperfecta, dentinogenesisimperfecta; systemic infections occurred after birth: scarlet fever, varicella, roseola, etc .; traumas of primary and definitive teeth, which cause pulp hemorrage and iron sulphide penetrates into the dentinal canals, the teeth getting the dark blue color; iron intoxication, causing a coloration according to the form of discoloration: enamel with whitish areas, cretaceous, enamel with yellowish spots or brown enamel, opaque (fig. 2).

At the patients under studywere effectuated only ceramic bevels because of their resistance over a longer period (up to 15 years).

Table 3

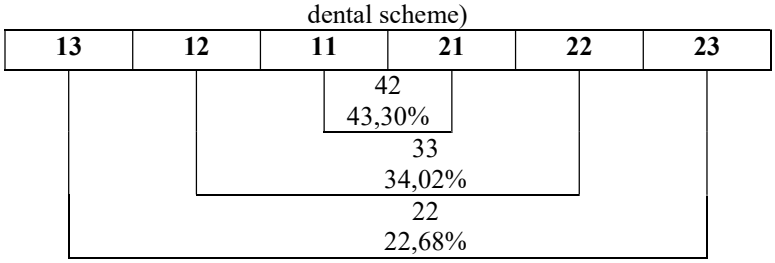
Distribution of cases according to the modalities to realize

	No.	**%**
In the dental office	33	34,02
In the dental technique laboratory	64	65,98

In more than 65% of the patients the realization of ceramic bevels were made in the dental laboratory, and in 34,02% of the patients the bevels were made in the dental office.

Table 4

Distribution of cases according to veneered teeth (according to the international dental scheme)



At 43,30% of the patients were veneered 2 teeth (11 and 21), at 34,02% 4 teeth (12, 11, 21, 22), and at 22,68% 6 teeth (13, 12, 11, 21, 22, 23).

The preparation of the teeth consisted of minimal reduction polishing of the enamel using a dental cutter on a depth of 0.3 - 0.8 mm.

At 27 patients were realized temporary veneers (27.84%), these having an extra cost and having the role of protecting the teeth until the application of the final veneers.

Choosing the color is an important step, so that after receiving the veneers, the teeth have a natural look.

After the perfect fitting of the veneers, the surface of the teeth was etched and prepared for the cementation. A special cement of the same color to each veneer was applied and the final veneer was glued to the tooth through the bonding technique.

One week after cementation, was verified the integrity and adaptation of the veneers to the gingiva.

Fig.. 4. veneers 13, 12, 11, 21, 22, 23

Recommendations for maintenance of the dental veneers were as follows: regular examination as well as sanitization performed approximately twice a year; daily hygiene by brushing 3 times a day, use of dental floss and mouthwash; avoiding harsh foods.

Was performed the evaluation at 3 years after receiving the veneers in 62 patients (63.92%) and the success rate was 100%. Over time, in the practice presented 3 patients who needed a veneer reconstruction due to the fact that they ate very harsh foods that conducted to the veneer's damage.

CONCLUSION

1. Dental veneers are a method more often applied in solving aesthetics problems.
2. Young women in the urban area have a higher addressability in this dental aesthetic procedure.
3. From the analysis of each case presented to the dental office and the physician-patient cooperation results the optimal choice of the dental aesthetics method, as well as of the material from which the veneer and the color is made.
4. The success rate of the veneers depends on the observance of the dentist's recommendations.

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