Vol. 11, No. 4, October - December 2019

PROSTHETIC ORAL REHABILITATION IN KNOWLEDGE OF PATHOLOGY OF THE ORAL MUCOSA

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ABSTRACT

For the dental pathology, as well as for other medical fields, the pathological anatomy proves to be indispensable for the correct diagnosis and scientific treatment, and the formation of the medical thinking. In the conditions of the great diversity of the oral pathology, the usefulness of the anatomical-pathological investigation is confirmed by its possibilities to elucidate the structural, material basis of the quasi-totality of the disorders in this field and to differentiate them on this basis, giving the clinician a conclusive diagnosis. Oral rehabilitation consists of diagnosing and treating the entire pathology from the level of the oral cavity, from the articular, muscular, bone level, by correcting the changes that have occurred following the loss of teeth, abrasions, dental malpositions or after removal of tumor formations from the face level. In order to fully rehabilitate the quality of the patient's teeth and the associated structures, the aim is to achieve a functional and aesthetic maximum of the functions of the dental apparatus; due to the appearance of multiple untreated dental problems, which led to the occurrence in the chain of diseases of dental, periodontal, occlusal nature, the appearance of dysfunctions in the neuro-muscular system, and to the algal syndromes of the temporomandibular joint.

Key words: *oral mucosa, oral rehabilitation, prosthetic therapy*

Prosthetics treats the methods of morpho-functional and aesthetic restoration of the dental-maxillary apparatus using biocompatible prostheses[1,2,3]. The type of the restored structures determines the delimitation of two distinct sub-domains: dental and maxillofacial prosthetics; the first approaches the restoration of the dento-alveolar arches, and the second deals with other maxillofacial structures[4,5,6]. Dental prosthetics is divided didactically and methodologically into three areas: fixed dental prosthetics, mobilization of partial edentation and mobilization of total edentation[7,8,9].

One of the challenges faced by dentists in current activity is the need to choose

between conservative and radical treatment in oral rehabilitation[10,11,12]. Such a choice is all the more difficult as it has to be taken into account at the same time for the oral-dental diagnosis, the anatomical-clinical features, the technical limitations and, last but not least, the patient's requests[13,14,15].

Oral rehabilitation is the oral, multidisciplinary, longitudinal care that takes place within a planned nurse; represents the complete treatment plan in relation to the wishes, acceptability and understanding of the patient; represents the maintenance by dispensing for a long time of the health status obtained from the treatment; discipline that studies the morphology of dental tissues; acquiring the communication skills with the patient in order to obtain the informed agreement for the oral rehabilitation treatment; acquiring the skills of sequential planning of the complete and complex treatment of oral rehabilitation[16, 17,18].

Oral rehabilitation consists of diagnosing oral pathologies and those of the temporal-mandibular joint or of the musculature, following the correction of the changes that have occurred after losing the teeth or changing their positions. and abrasions[19].

Clinically the health of the teeth and gums is evaluated, and then a treatment plan is proposed.

The establishment of a treatment plan involves the personalization of all the general data regarding the clinical, paraclinical aspects, as well as a synthesis of all the clinical-biological, socio-economic and psycho-behavioral indices of the patient.

One of the challenges that dental practitioners face in the current activity is the need to choose between conservative and radical treatment in oral rehabilitation. Such a choice is all the more difficult as it has to be taken into account at the same time for the oral-dental diagnosis, the anatomical-clinical features, the technical limitations and, last but not least, the patient's requests[20].

Oral rehabilitation treatment recommends performing clinical and paraclinical examinations (study models, x-rays, computer tomography, imaging, magnetic resonance imaging). Computer-tomography is the most faithful technique for appreciating the dimensions of the ridge, the relation with the neighboring anatomical structures, being able to specify the bone density and allowing bi- and three-dimensional reconstructions[21].

The treatment plan is structured according to the clinical state, starting with the health education explaining the correct and timely hygiene of the oral cavity.

The healing of all the infectious and inflammatory processes is realized, by means of dental extractions or extractions of dental nerves. Until the completion of the treatment with the definitive prosthesis, (the accomplishment of the prosthetic works: axes, crowns, prostheses) it is recommended to realize a provisional prosthesis, which prefigures the form of the definitive prosthetic work[22] .

Provisional prostheses help determine the correct position of the temporal-mandibular joint and oral musculature. After establishing the distance between the two arches, one proceeds to the final prosthetic works.

Rehabilitation represents the morphology of the joint tissues, their correlations with the organism, their description and interpretation and their pathology.

Oral pathology has as main objectives: the recognition and identification of pathological changes of the structures in the oral-dental sphere, the acquisition of the notions related to the alteration of the balance of the oral environment and the oral

microbism and their consequences, the knowledge of the own pathology of the oral mucosa as well as oral manifestations in general diseases; knowledge of the anatomical and histophysiological organization of the oral structure - especially that of the oral mucosa -, as well as the understanding of notions related to the oral environment and microbism. A particular place in the study of oral lesions is the oral manifestations in AIDS, lesions from autoimmune, malignant diseases, those with malignant potential[23,24,25,26].

Oral rehabilitation is a complete and complex segment of oral pathology therapy. It contributes to the continuous improvement in order to acquire knowledge in the field of oral rehabilitation, which represents an integrated system, in close relation with the human body, achieving with it a unitary whole.

Inflammatory pathology of the oral mucosa

Viruses are among the simplest and smallest microorganisms that infect the human body. Herpetic viruses have a tropism for epithelial cells.

The herpes simplex virus consists of a single DNA chain, the genome of this virus conferring its lithic properties on human epithelial cells and the ability to stay latent in neural tissue.

Patients experience lesions of primary infection, followed by a latent state. Sometimes the virus enters the mucosal membrane barrier without making clinically visible changes. Due to the neurotropism of the virus, it attacks the peripheral nerve and localizes to the regional ganglia, where it remains in a latent state.

The reactivation of the virus can be triggered by a number of factors such as: trauma, emotional stress, cold, sunlight, fever, etc.

Acute primary herpetic gingivostomatitis is a rare clinical form of herpetic infection, characterized by the creation of multiple superficial ulcers both at the level of the keratinized surfaces and in the vicinity of the glands.

Oral recurrent herpes is manifested by the formation of groups of vesicles that rupture and give rise to superficial ulcers.

Intraoral recurrent herpes occurs in the form of superficial ulcerations arranged in the bouquet, at the level of the oral mucosa.

Herpes zoster is a recurrent form of varicella infection that appears clinically in the form of a bladder rash of the skin or mucosa.This eruption arranged on an erythematous background has a unilateral disposition, which follows the cutaneous distribution of the affected peripheral nerve. Characteristically, the pain does not disappear even after the injury has healed.

In contrast to the other herpes viruses, Epstein Barr virus presents tropism for lymphocyte B. These lymphocytes synthesize antibodies that affect the proper functioning of T lymphocytes, lymphocytes that appear histopathologically modified. EBV infections are chronic, dragging.

Through lymphocytes, the Epstein Barr virus reaches the level of epithelial cells, especially in the oropharynx and nasopharynx.

It is transmitted through saliva, where it reaches through the peeling of epithelial cells from the level of the oral cavity, being present in about 70% of the adult population.

Clinically, at the level of the oral cavity, patients present with multiple petitions of the soft palate.

The cytomegalic virus appears in saliva, through intimate and parenteral contact.

The cytopathic effect of the virus, which consists in the increased volume of the affected cell and the presence of large intranuclear inclusions, surrounded by a

clear halo, is highlighted.

Bacterial infections: Streptococcal infections - of the large group of these Gram positive microorganisms, two are of great importance for oral pathology, namely: Streptococcus pyogenes and Streptoccocus viridans.

Streptococcus pyogenes is a betahemolytic streptococcus, responsible for a number of infections such as pharyngitis, tonsillitis and, more rarely, mucositis and gingivitis.

Streptoccocus viridans is alpha-hemolytic and is

A completed prosthetic work must consider an intellectual enterprise before the manual one.

CONCLUSIONS

The links that can be established between the therapeutic solutions and the clinical-biological, bioeconomic and psycho-behavioral parameters of the patient, represent importance in the process of developing a treatment plan for prosthetic oral rehabilitation.

REFERENCES

1. Forna N, Protetica Dentara,Vol I si II, 2011,Editura Enciclopedica Bucuresti 3. Forna N., Evaluarea starii de sanatate afectate prin edentatie,Editura Demiurg,2007.
2. Linda J Dula, Enis F Ahmedi, Zana D Lila-Krasniqi, Kujtim Sh Shala. Clinical Evaluation of Removable Partial Dentures on the Periodontal Health of Abutment Teeth: A Retrospective Study Open Dent J. 2015; 9: 132–139.
3. Nimigean Vanda Roxana, Oltean Dumitru: „Reabilitare orală. Note de curs.” Editura Cermaprint, Bucureşti 2013.
4. Oltean Dumitru, Nimigean Vanda Roxana, Oltean Anca Mihaela: „Reabilitare orală” Editura Universitară „Carol Davila”, Bucureşti 2007.Nimigean Vanda Roxana, Păcurar Mariana: „Reabilitarea orală a adolescentului şi adultului tânăr.” Ed. Tehnoplast Company, Bucureşti 2006
5. Comăneanu Monica R., Ghergic Doina L., Filipescu Alina G. – Radiologie dentară, Ed. Printech, Bucureşti, 2011.
6. Checherita, L. E., Forna, N.C.,, Macovei, Surdu,A. et al. Influence of Chemical Therapeutical Methods on Manducatory Muscles,Rev.Chim. , 64 ,no.11 ,p.: 1312-1316 ,2013
7. Saito M,Notani K,Miura Y,KawasakiT.. complications and failures in removable partial dentures: aclinical evaluation.J.Oral Rahabilitation 2002;29:627-33.
8. Dascalu, C.G., Antohe, M.E., Golovcencu L., et al.,Interaction Schemes for the Analysis of Combined Action of Risk Factors, 2017 IEEE International Conference on e-health and Bioengineering Conference (EHB) Book Series: E-Health and Bioengineering Conference, 2017, Pages: 462-465
9. Ciocan-Pendefunda,A.A.,Martu,M.A.,Antohe,M.E.et al.,Indirect composite veneers as a social therapeutic solution.A case report, Romanian Journal Of Oral Rehabilitation, 10 (4), 2018 Pages: 91-96
10. Vasluianu, E., Popescu,V., Grigoriu,A., et al., Comparative study concening the FIR Analysis and the performances of chitosan –based wrinkle-proofing agents, Revista de Chimie, 64(10), 2013, pg.1104-1115
11. Orthlieb J.D., Constantinescu M.V., Ré J.Ph., Păuna Mihaela Rodica Criterii de management ale planului de tratament în reabilitarea orală Revista Română de Stomatologie (Ro J Stomatol), 2011, LVII, 1, 48 – 55 ISSN: 1843-0805; Cod CNCSIS: 756.

12. Gradinaru, I., Antohe M.E., Hurjui, L.L,Biomaterials used in oral rehabilitation of the edentulous allergic patients, Romanian Journal of Oral Rehabilitation,10(1),2018, Pages: 114-119
13. Scutariu, M. M., Ciurcanu, O. E., Forna Agop,D., ; et al.,Importance of dental maxillo-facial aesthetics in dental therapy, MedicaL-SurgicalJournal Volume: 120 Issue: 4 ,2016, Pages: 926-931
14. Salceanu ,M., Vataman, M., Aminov,L. et al., Diagnosis and follow-up of the periapical lesions in the non-surgical endodontic treatment:a CBCT study, Romanian Journal of Oral Rehabilitation, 9 (2), 2017, pag :32-36,
15. Bahrin,L.G., Lungu, N.C., Forna,N.C.,Zwitterionic3-(1,3-Dithiol-2-ylium)phenolates, et al.,Rev. Chim, 64(11), 2013, pg.1284-1294
16. Checherita . L.E., Forna N.C., Stamatin O.et al., Correlations between biochemical parameters integrated in stomatognathic system dysfunctional syndrome, Revista de chimie Volume: 64 Issue: 10 ,2013, Pages: 1172-1181
17. Saveanu, C.I., Forna, N.C., Danila, I.et al.,Management attitudes of dentists in dental offices, Romanian Journal of Oral Rehabilitation, 10(4), 2018, pg.149-156
18. Esanu, I., Constantin, I., Budacu, C.C., et al., The role of chemical factors in the diabetes and the prediabetes that leads to polimorfe oro-maxilo-facial alterations inmalformative syndrome, Rev. Chim., 70(6), 2019, pg.2112-2117
19. Ghiorghe ,C.A., Gamen, A.C.,,Tirca,T,et.al., Laser therapy evaluation in complications of restorations by toal etch technique, Rev. Chim., 69(4),2018, pg, 921-925
20. Ciurcanu, O., Ciupilan, C., Salceanu, M. et.al.,,Particularities of the dental treatment strategy in geriatric patients, Romanian Journal of Oral Rehabilitation,10(1),2018, pg.108-113
21. Bernhard Pommer, Martin Krainhöfner, Georg Watzek, Gabor Tepper, Charalabos-Markos Dintsios. Relevance of variations in the opposing dentition for the functionality of fixed and removable partial dentures: a systematic review. Int J Dent. 2012;
22. Zegan,G., Golovcencu,L.,Cernei,E.R., et al., Structural and morphological characterstics of hybrid nanomaterials type ascorbic acid hydrotalcite used for stimulating salivary secretion, Rev. Chim., , 69(5), 2018, pg.1244-1246
23. Rebegea,L., Stefan,A.M., Firescu,D., et al.,,Paraneoplasticpemphigus associated with a hypopharynx squamous cell .Case report, Acta Medica Mediterranea,34(5),2018, pg.1265-1270
24. Budacu, C.C.; Ioanid, N.; Romanec, C.; et al .Dental Inclusion of Canine and Wisdom Tooth in Orthodontics Chemical Necroses, REVISTA DE CHIMIE , 2018 Volume: 69 Issue: 8 Pages: 2191-2196
25. Trus, C.; Munteanu, M.; Diaconu, G.; et al. Venous thrombectomy - treatment of entero-mesenteric near total venous acut infarct, CHIRURGIA Volume: 105 Issue: 3 , 2010, Pages: 415-418
26. Budacu,C., Cioranu, S.V..Ibric, Chiscop, I., et al.,Apicoectomy-endodontical surgical procedure, Rev. Chim., 68(11), 2017, pg.2654-2657