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FEATURES OF CLINICAL COURSE OF APICAL PERIODONTITIS OF PERMANENT TEETH WITH DISORDERS OF ROOT FORMATION AS A RESULT OF INJURY

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Relevance. Prevalence of trauma of permanent teeth is 13% - 17,4% [1]. Injuries teeth occur most often in children [1, 2, 3]. Pulp necrosis occurs in 34.2% of injured teeth [4]. It promotes the growth and multiplication of opportunistic microorganisms in the root canal system. The action of toxins and products of vital activity of these microorganisms cause damage to the periapical tissues, and in teeth with incomplete root formation often lead to a stop of root development.

The high prevalence of post-traumatic periodontitis stipulate the importance of their timely clinical and radiological diagnosis.

The purpose of the work is to study the clinical features of the post-traumatic periodontitis of permanent teeth with imcomplete root formation.

Materials and methods. 17 children aged 9-15 years with post-traumatic periodontitis of permanent teeth with incomplete root formation were examined. 1.5-3 years ago there was an injury to these teeth.

When making the diagnosis, we relied on data from clinical and radiological studies.

Results and its discussion. More often, children complained of aesthetic defect, 23.5% of patients (4 children) - partial traumatic fractures of the tooth crown, 47% (8 children) - change of tooth color. In six cases, among them, patients paid attention to the periodic appearance of "ulcers" on the gums near the teeth. Five children complained of discomfort, pain when biting a tooth, changing its color.

52.9% (9 children) did not go to the dentist immediately after the injury. Eight children were given emergency care after a tooth injury, but they did not follow the doctor's recommendations for the need for dynamic monitoring of the injured tooth.

On external examination of the skin, red border of the lips of 12 children pathological manifestations were not detected. During intra-oral examination, the discoloration of damaged teeth was revealed, among them - intact upper jaw incisor, crown fracture within enamel - in 2 children, within enamel and dentin - in 6 and in 3 cases with opening of the cavity tooth. The pigmented dentin was removed by layers with an excavator, the probing of the bottom and orifices of the root canals was painless. Sensitive and bleeding granulations were detected in 3 patients, and the root canal walls were filled with infected softened predentin. In these 12 children, the reaction to tooth percussion was painless. The mucous membrane in the area of the causal teeth was hyperemic, with a cyanotic tinge, in seven cases fistula and scarring were found on it.

X-ray examination revealed that the teeth had incomplete formation of their roots. The destruction of the bone tissue with fuzzy contours was determined in the periapical area, the compact plate of the alveoli was destroyed. Based on the data of clinical and radiological studies in 12 teeth, chronic granulating periodontitis was diagnosed.

Five children had weakness, sweating, chills, fever, headache. Edema and facial hyperemia in the projection of the causal tooth were found in them. Regional lymph nodes were enlarged, motile, and painful on palpation. Enamel spikes were detected in two incisors, in three cases - tooth crowns were restored with a composite material with poor marginal fit and secondary caries. Horizontal and vertical percussion of the causative and adjacent teeth were painful. Hyperemia and swelling of the mucous transitional fold in the area of the causal teeth were found, there were scars after fistulas. After opening the tooth cavity of 4 teeth in the root canals, purulent exudate was detected. In one case, the channel had a softened siler with moving gutter pins. Based on the data of clinical and radiological studies in 5 teeth, exacerbation of chronic granulating periodontitis was diagnosed.

In 70,6% of observations (12 teeth) periodontitis was diagnosed in teeth with a crown fracture within the enamel, enamel and dentin. 71% of lesions were diagnosed in maxillary incisors, 17,64% - in mandibular incisors.

8 children, among the examined had a bite pathology - protrusion of the teeth of the front part of jaw (5 children) and a distal deep bite (3 children). In 70,6 % of lesions, destructive forms of periodontitis were most often diagnosed in the maxillary incisors.

This is due to histomorphological features of periodontal tissues in childhood. Chronic granulomatous periodontitis in teeth with incomplete tooth root formation has not been diagnosed.

Conclusion. The main causes of the development of destructive forms of posttraumatic periodontitis are untimely appeal for help and lack of dynamic monitoring of the injured teeth. Bite pathology may be a risk factor for dental injury. Therefore, in order to prevent dental injuries and to develop their complications, it is necessary to pay attention to the public health work on the risk factors of dental injuries, methods of its prevention and tactics in the case of damage to the teeth. In the vast majority, periodontitis was diagnosed in teeth with crown fractures within the enamel and enamel and dentin (76% of teeth) and in the incisors of the upper jaw (71% of teeth). The peculiarity of the clinical course of periodontitis is dominated by chronic granulating periodontitis. Rapidly progressing destruction of bone tissue is a peculiarity of the inflammatory process in periodontal tissues in childhood.

References:

- Petti, S., Glendor, U., Andersson, L. (2018). World traumatic dental injury prevalence and incidence, a meta-analysis -One billion living people have had traumatic dental injuries. *Denta Traumatol*, (34(2)), 71-86. htts:||doi.org| 10.1111/edt.12389.
- Hegde, R., Agrawal, G. Prevalence of Traumatic Dental Injuries to the Permanent Anterior Teeth among 9- to 14-year-old Schoolchildren of Navi Mumbai (Kharghar-Belapur Region). (2017). *Indialnt J Clin Pediatr Dent.* (10(2)), 177–182. htts://doi.org/10.5005/jp-journals-10005-1430
- Kumar, K.N., Venkatasubramanian, R., Togaru, H. Incidence of traumatic dental injuries in children aged 3–18 years in Tirupathi. (2017). Int J Pedod Rehabil. (2), 73-76.

htts://doi.org/10.4103/ijpr.ijpr_19_17

 Lin, S., Pilosof, N., Karawani, M., Wigler, R., Kaufman, A.Y., Teich, S.T. (2016). Occurrence and timing of complications following traumatic dental injuries: A retrospective study in a dental trauma department. J Clin Exp Dent. (8(4)), 429-436. htts://doi.org/10.4317/jced.53022.

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INTEGRATED APPROACH AT THE RELATED DISCIPLINES AT THE KHARKIV NATIONAL MEDICAL UNIVERSITY

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Changing approaches of diagnosis and treatment of diseases necessitates a correction of the curriculum of higher medical education. If several years ago the programs included an extensive list of knowledge, skills that a future specialist should demonstrate, then in state educational institutions the concept of competence is postulated - a generalized category that implies a complex and comprehensive readiness of future doctors for the chosen profession. Moreover, any competence cannot be formed by means of one discipline, it requires interdisciplinarity in its development, which sharply raises the question of continuity in the teaching of any branch of medicine [1].

Studying at the medical universities in our country traditionally begins with the mastering of fundamental disciplines. It may help future doctors to understand that life processes of the organism are maintained at several levels of structural organization. These include the chemical, cellular, tissue, organ, organ system, and the organism level. Higher levels of organization are built from lower levels. Therefore, molecules combine to form cells, cells combine to form tissues, tissues combine to form organs, organs combine to form organ systems, and organ systems combine to form organisms. It is very important not to lose the links of one chain.

Morphological knowledge is the theoretical core of any medical specialty, without which high-quality diagnosis is impossible, and the treatment of the disease without knowledge of the structure becomes meaningless. That is why the relevance of the interaction of specialists of various profiles in the development of student competence is not in doubt [2]. Morphological disciplines lay the foundations of a structural and functional approach in the analysis of the vital functions of a healthy organism. Monitoring and management of continuity between related disciplines and their curriculum is a crucial contribution to successful medical education.