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DANGERS OF ORTHODONTIC TREATMENT

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Relevance. The article is devoted to the study of the prevalence of ingestion and aspiration of foreign bodies by patients undergoing orthodontic treatment. 17 orthodontists with various work experience were surveyed. Data obtained from the results of 3,600 visits per year. As a result of statistical processing of the obtained data, the probability of danger of swallowing foreign bodies by orthodontic patients was established.

The goal: is to establish the prevalence of cases of swallowing orthodontic items during orthodontic treatment in the Republic of Belarus.

Materials and methods. In the course of studying the aspects of swallowing and aspiration of foreign bodies by patients, 17 orthodontist dentists were surveyed, who provided data on 3,600 visits in 2018. According to the work experience indicated in the questionnaire, the doctors were divided into 4 groups: 1 group - with less than 5 work experience years - 6 ($35.29 \pm 11.59\%$) people, group 2 - 5-10 years - 6 ($35.29 \pm 11.59\%$), group 3 - 10-15 years - 3 ($17.65 \pm 9, 25\%$), group 4 - more than 15 years - 2 ($11.76 \pm 7.81\%$).

The distribution of the number of admitted patients with potentially dangerous elements to be swallowed and aspirated in the construction of orthodontic appliances according to the work experience of the dentist-orthodontist: 120 ($10.00 \pm 0.87\%$) patients with an experience of less than 5 years and 5-10 years of experience - 137 ($11.42 \pm 0.92\%$), 10-15 years old - 80 ($11.43 \pm 1.20\%$), more than 15 years-49 ($9.80 \pm 1.33\%$).

Results and discussions. As a result of the survey, it was found that in 7 ($0.19 \pm 0.07\%$) cases, patients swallowed orthodontic elements at home. The most common was the swallowing of support braces in 5 ($71.43 \pm 17.07\%$) cases, and in $28.57 \pm 17.07\%$ (in 2 patients) separation ligatures. Doctors with work experience less than 5 years (group 1) swallowed support braces at home in 2 ($28.57 \pm 17.07\%$) and 1 ($14.29 \pm 13.23\%$) cases of separation ligature, 5- 10 years (group 2) - in 2 ($28.57 \pm 17.07\%$) cases, 10-15 years (group 3) - in 1 ($14.29 \pm 13.23\%$), more than 15 years (group 4) - in 1 ($14.29 \pm 13.23\%$) case, the ingestion of separation ligature on the 5th day of wearing was fixed. No cases of ingestion or aspiration have been identified at the orthodontic reception. In all cases, the outcome was favorable and did not require specialized care in the hospital.

Conclusions. In order to increase awareness and responsibility, patients and their parents should always be informed verbally and in writing about precautionary measures during orthodontic treatment by the attending physician. It is necessary to focus on the dangers of the correction of the position or repair of orthodontic appliances in the oral cavity at home. In no case do not try to bite the section of the arc that came out of the castle. In this case, you must call and make an appointment with a doctor. Similarly, should be done in cases of bracing braces, disintegrating rings with struts, breaking off soldered wire elements from the ring, detecting the absence of separation ligatures.