Deformation of the dentition is a collective name. It includes various anomalies, most of which are caused by skeletal deformities. Most often, cranial deformities lead to orthodontic problems. These include defects in the cranial bones, position and size of the jaws. They have the greatest influence on the formation of the dentition and bite.

Other causes of dental deformities

In addition to deformations of the development of the skull, other reasons can lead to changes in the dentition:

• Poor posture. When posture is impaired, the body begins to adapt. Not only the position of the spine changes, but also other parts of the musculoskeletal system. These adaptive changes affect the dentofacial apparatus. A defect in the dentition develops.

• Bad habits in a child. This may involve prolonged pacifier or finger sucking. Such habits greatly affect the formation of the dentition and can lead to tooth movement and changes in bite.

• Intrauterine pathologies. They may be due to various reasons. For example, diseases suffered by the mother during pregnancy. As a result, deformations of the jaws and tooth buds may develop.

• Periodontal diseases. Weakened tissues cannot hold teeth in their normal position. They begin to shift, the dentition becomes deformed.

• Partial edentia. When one or more units are lost, the rest begin to shift. As a result, a dental defect develops.

Types of dental deformities

Teeth can move from their normal position in different ways. Depending on the type of displacement, types of dental deformations are distinguished:

• Rotation of the tooth relative to its axis.

• Tilt towards the palate, cheek, tongue.

• Vertical displacement of teeth, leading to their lengthening.

• Distal displacement of one unit posteriorly in relation to the rest of the dentition.

• Mesial displacement is the opposite of distal displacement, as the deformed tooth moves forward.

• Crowding – characteristic of an underdeveloped small jaw. There is not enough space for normal development of the dentition. The teeth move in different directions, overlapping each other.

• Gaps and crevices in the dentition develop when the jaw size is large. Visible gaps (diastemas, tremata) form between adjacent dental units.

In complex cases, a combined displacement can be observed, combining different anomalies. Visually, such defects look like uneven teeth.

Diagnosis of dental deformations

Dental deformities are not an independent diagnosis. Treating them only with traditional methods used to correct the bite is not always effective. If the cause that caused the deformation of the dentofacial apparatus is not identified and eliminated, there is a risk of relapse.

To make a diagnosis and select treatment options for dental deformation, doctors at our clinic use:

• Visual examination of the oral cavity. The doctor will definitely ask you when the problem began. This will help determine the causes of the development of malocclusion.

• Paraclinical studies. After a visual examination and medical history, you will be prescribed tests: x-rays of the teeth and alveolar process, x-rays of the temporomandibular joint, tomography, etc.

Examination of the dentition gives the dentist a lot of information about the bite. With its help, you can determine the nature of the deformation, the condition of the periodontium, and roots. Instrumental diagnostic methods are used to diagnose functional and morphological disorders.

With the help of examination and questioning, you can obtain other data on the condition of the dentofacial apparatus:

• Position of teeth in jaw. The position of the dentition is assessed in relation to the sagittal plane, focusing on the line between the incisors. If this line is displaced, a more precise occlusion study is necessary. The doctor determines the size of the incisal overlap, the position of individual units, and the nature of their occlusal surface.

• Features of the movement of the lower jaw during opening and closing of the mouth. Zigzag movement of the jaw may indicate pathologies of the TMJ and masticatory muscles.

Impaired closure of teeth and their rotation around their axis. Movement of molars and premolars is easily diagnosed during examination.

Instrumental diagnosis of dental anomalies allows an accurate diagnosis.

Treatment

Treatment methods for dental deformities are chosen depending on the type of pathology. Most deformities not associated with the loss of antagonist teeth develop in childhood. Therefore, the problem needs to be resolved as early as possible. In orthodontics they use:

• Plates. Can be used immediately after baby teeth are replaced by permanent teeth. The plate puts pressure on the dentition, as a result it is aligned. Installation of plates is indicated for patients aged 7-12 years. At this time, the child’s bones are growing rapidly, so the technique will be effective.

• Trainers. They can be used in early childhood. The trainer is a silicone structure that resembles a mouth guard. They are worn for several hours. Elastic trainer protects the dentition

from excessive pressure on the tongue and cheeks and prevents tooth displacement.

• Braces. Can be installed on children over 12 years of age. The orthodontist determines the need to use braces based on the results of the study.

These are the most common options for orthodontic treatment of dental deformities. Specialists at the Zuub.rf dental clinic believe that the approach to eliminating this problem should be comprehensive. It is important not only to visually straighten the dentition and correct the bite, but also to eliminate the cause that led to the development of the anomaly.