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METHODOLOGICAL RECOMMENDATIONS FOR STUDENTS

MODULE

"PEDIATRIC MAXILLOFACIAL SURGERY"

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Lesson #1

Topic: TMJ diseases in children. Their classification. Primary bone injuries and diseases of the temporomandibular joint. Osteoarthritis, osteoarthritis, bone ankylosis, neoarthritis.

The purpose of the lesson: To study the clinic, diagnosis, treatment and differential diagnosis of major diseases of the temporomandibular joint in children.

Questions, knowledge of which is necessary to study this topic:

1) Anatomy of the TMJ.

2) TMJ functions.

3) Chewing muscles.

4) Types of occlusion.

Issues to be studied:

1) Classification of TMJ diseases.

2) X-ray diagnostics of TMJ functional disorders.

3) Functional diagnostics.

4) Differential diagnosis of TMJ pain dysfunction with diseases having similar symptoms.

5) Osteoarthritis, osteoarthritis, bone ankylosis, neoarthritis. Etiology, pathogenesis, clinic, differential diagnosis, treatment.

The TMJ is a complex functional system, has specific features that distinguish it from other joints of the musculoskeletal system. This joint is formed by the head of the condylar process of the lower jaw, the mandibular fossa of the temporal bone and the anterior posterior slope of the articular tubercle. The bone structure is covered by an articular capsule, which is attached at the top to the base of the temporal bone, at the bottom to the neck the condyle process. The articular disc divides the TMJ into two spaces (upper, lower). Both spaces are filled with synovial fluid. The capsular-ligamentous apparatus of the TMJ consists of extracapsular and intracapsular ligaments. The joint has a well-developed vascular network. The pairing of the TMJ, the synchronicity of movements is one of its important kinetic functions. The joint provides vertical, sagittal and transversal movements.

Knowledge of the features of the TMJ is necessary for the correct choice of methods for the diagnosis and treatment of diseases of this joint, especially during childhood against the background of anatomical and functional changes caused by the growth of the child.

All TMJ diseases can be divided into two groups: primary-bone and functional. In the primary-bone type of pathology, the cause of TMJ disease may be a congenital imperfection of the developing bone or inflammation of the articular ends of the bones - the condyle of the mandible and temporal bone. Primary bone diseases of the joint in childhood lead to a violation of the hereditarily determined growth of the mandibular bone due to congenital inferiority or death in the process of inflammation of the zone of active bone growth localized in the condyle of the lower jaws.

Functional diseases are accompanied by the development of a chronic inflammatory or inflammatory-degenerative process, primarily affecting the articular cartilage, and then slowly, over the years, spreading to the bone tissue of the articular ends of the bones. Primary cartilaginous joint diseases develop in adolescence due to age-related dysfunction of the TMJ and masticatory muscles and can lead to pathogenetically related diseases - habitual dislocation, acute and chronic arthritis, arthrosis.

CLASSIFICATION OF DISEASES OF THE TEMPOROMANDIBULAR JOINT IN CHILDREN AND ADOLESCENTS [ACCORDING TO N.N. KASPAROVA, 1979].

1. Primary bone injuries and diseases of the joint.

1.1. Congenital pathology of the TMJ.

1.2. Inflammatory diseases of the articular ends of bones: osteoarthritis; neoarthrosis; secondary deforming osteoarthritis; bone ankylosis.

2. Functional TMJ diseases and their outcomes in adolescence.

2.1. Juvenile TMJ dysfunction: habitual dislocation; pain syndrome of dysfunction.

2.2. Inflammatory and inflammatory-degenerative primary cartilage diseases developing as a result of joint dysfunction: arthritis (acute, chronic); deforming juvenile arthrosis.

Osteoarthritis (deforming osteoarthritis) is the most common type of arthritis, and is a chronic disease affecting the joint, articular cartilage, articular sac, bones, muscles and ligaments.

Ankylosis is the immobility of the joint, which occurs as a result of the formation of bone, cartilage or fibrous fusion of the articular ends of the articulating bones. Ankylosis can occur as a result of trauma (injury, closed comminuted fracture of the articular ends of bones, bruising and other injuries, especially repeated, accompanied by intracranial hemorrhage), an infectious or degenerative process in the joint, as well

as with improper treatment of diseases and injuries of the joints, when the functional method of treatment is not used enough and prolonged immobilization is used.

Neoarthrosis or a new (false) joint is a pathological articulation in the immediate vicinity of the TMJ or instead of it, resulting from the displacement of the condylar process of the lower jaw to a new position under the influence of trauma or as a result of lysis of the head of the condylar process after injury or inflammation. Compared to the norm, this is a pathological and defective bone connection. Neoarthrosis — this is the most favorable outcome of TMJ osteoarthritis. It can develop after extra-articular and high intra-articular fractures the condyle of the mandible, as well as after hematogenous or odontogenic osteomyelitis of the mandible.

Questions of test control for a practical lesson:

1. Functional-distension diseases of the temporomandibular joint in children and adolescents develop as a result of:

a) chronic injury of the temporomandibular joint;

b) acute injury of the temporomandibular joint;

c) odontogenic osteomyelitis of the jaw;

d) fracture of the lower jaw;

e) disproportions of the growth of the musculoskeletal system.

2. Indicate the most likely causes of acute osteoarthritis TMJ in children:

a) acute purulent otitis media;

b) acute dislocation of the TMJ;

c) acute purulent lymphadenitis of the parotid-masticatory region;

d) severe form of influenza;

e) intra-articular fracture of the condylar process of the lower jaw.

3. Indicate radiological signs not characteristic of secondary deforming osteoarthritis of the TMJ in children:

a) the head of the condyle is flattened and sclerosed;

b) the head of the condylar process is located in front of the articular tubercle;

c) the articular gap is uneven and approaches a straight line;

d) underdevelopment of the lower jaw branch;

e) shortening of the condyle process and thickening of its neck.

4. The clinic of unilateral fibrotic ankylosis of the TMJ is characterized by:

a) inability to open the mouth;

b) pain in the joint area;

c) distal bite;

d) restriction of mouth opening;

e) oblique bite.

5. The clinic of bone unilateral ankylosis of the TMJ is characterized by:

a) open bite;

b) distal bite;

c) limited mouth opening;

d) inability to open your mouth;

e) pain in the affected TMJ.

6. The clinic of unilateral neoarthrosis in the temporomandibular joint in children is characterized by:

a) inability to open the mouth;

b) cross bite;

c) crunching and clicking in the joint;

d) unilateral underdevelopment of the lower jaw;

e) limited mouth opening.

7. For the clinic of juvenile TMJ joint dysfunction, the most characteristic are:

a) habitual dislocation;

b) crunching and clicking in the joint;

c) edema and hyperemia of the skin in the parotid region;

d) inability to open your mouth;

e) oblique bite.

8. Acute traumatic dislocation of the TMJ most often happens:

a) rear;

b) lateral two-sided;

c) lateral one-sided;

d) front one-sided;

e) front two-sided.

9. Specify the methods used to treat juvenile dysfunction TMJ in children:

a) injection of hormonal anti-inflammatory drugs into the joint cavity;

b) active mechanotherapy;

c) TMJ redressation;

d) the use of devices that restrict the opening of the mouth;

e) restriction of solid food intake.

10. Timing of surgery for bone ankylosis of the TMJ:

a) after the end of the growth of the bones of the facial skeleton;

b) at any age after diagnosis;

c) after orthodontic treatment;

d) after 16 years;

e) after 18 years.

Lesson #2

Topic: Congenital malformations of the face. Congenital cleft of the upper lip and palate. Anatomical and functional disorders. Classification. Principles and terms of surgical treatment depending on the type of cleft.

The purpose of the lesson: To study the etiology, pathogenesis, clinic methods of complex treatment of children with congenital malformations of the face, including congenital cleft lip and palate, as well as the basics of prevention and medical rehabilitation of children of this group; features of feeding children with congenital cleft lip and palate.

Questions, knowledge of which is necessary to study this topic:

1) Anatomy and topographic anatomy of the face and jaw.

2) The timing of embryonic development of tissues of the dental system.

3) The circular muscle of the mouth.

4) Anatomy of the soft and hard palate.

Issues to be studied:

1) Classification of congenital malformations of the face.

2) Pathogenesis, etiology of congenital malformations (exogenous and endogenous factors).

3) Classification of congenital clefts of the upper lip and palate.

4) Clinical (anatomical, functional disorders) in various forms of congenital clefts of the upper lip and palate.

5) Features and methods of care and feeding for children with congenital cleft upper lip and palate.

6) Treatment and medical rehabilitation. Terms and content of the dispensary period.

The causes of congenital malformations in humans can be represented by the following scheme:

A. Endogenous causes:

1) Changes in hereditary structures (mutations).

2) Endocrine diseases.

3) "Overripe" of germ cells.

4) The age of the parents.

B. Exogenous causes:

1) Physical factors:

a) radiation;

b) mechanical.

2. Chemical factors:

a) medicinal substances;

b) chemicals used in everyday life and industry;

c) hypoxia;

d) malnutrition.

3. Biological factors:

a) viruses;

b) mycoplasma;

c) protozoal infection.

The authors believe that the main cause of congenital malformations are endogenous factors, and exogenous factors, which previously received much attention, are of secondary importance.

Etiological factors leading to the appearance of malformations faces and jaws are divided into exogenous and endogenous.

Exogenous causes

Physical factors:

- mechanical (abortions, incorrect fetal position, uterine tumors, multiple pregnancies, injuries to the mother in the first months of pregnancy, etc.);
- thermal (hyperthermia);
- ionizing radiation (external and internal).

Chemical factors:

- hypoxia (anemia, toxicosis in pregnant women, uterine bleeding, chronic alcoholism, etc.);
- inadequate and unbalanced nutrition;
- hormonal discorrelation (diabetes mellitus, thyroid diseases in pregnant women, phenylketonuria);
- teratogenic poisons (gasoline, formaldehyde, heavy metal salts, nitric oxide, mercury vapor, alcohol, etc.);
- medicinal substances (chemotherapy drugs, adrenal cortex hormones, insulin, vitamin A, salicylates, diazepam, etc.).

Biological factors:

- viruses (measles rubella, measles, cytomegalovirus, herpes simplex, mumps, chickenpox);
- bacteria and their toxins;
- the simplest.

Mental factors (causing hyperadrenalinemia):

- endogenous causes
- pathological heredity (in a dominant or recessive way);
- biological inferiority of germ cells (wrong lifestyle; bad habits: alcohol, smoking, drugs);
- influence of age and gender of parents.

Questions of test control for a practical lesson:

1. Specify the tasks of the surgeon during cheiloplasty:

a) to suture the cleft;

b) lengthen the upper lip;

c) normalize the sucking function;

d) normalize the function of swallowing;

e) all the answers are correct.

2. Specify the tasks of the surgeon during uranoplastic:

a) to normalize the function of speech;

b) lengthen the soft palate;

c) suture the cleft;

d) normalize the function of swallowing;

e) all the answers are correct.

3. With congenital clefts of the upper lip, the following functions are violated:

a) chewing;

b) swallowing;

c) sucking;

d) hearing;

e) all the specified functions are violated.

4. With congenital cleft palate, the following functions are disrupted:

a) breathing;

b) swallowing;

c) sucking;

d) speeches;

e) all the specified functions are violated.

5. Cheiloplasty at the department is usually carried out at the age of:

a) up to 1 month of the child's life;

b) from 2 to 3 months of the child's life;

c) from 4 to 7 months of the child's life;

d) from 8 to 10 months of the child's life;

e) after 12 months of the child's life.

Lesson # 3

Topic: Congenital syndromes involving the maxillofacial region. Congenital cysts and fistulas of the face and neck. Dermoid and epidermoid cysts.

The purpose of the lesson: To study congenital syndromes involving maxillofacial region. Learn how to pre-diagnose and determine the necessary, additional methods of examination and treatment.

Questions, knowledge of which is necessary to study this topic:

1) Anatomy of the structure of the lower jaw.

2) Anatomy of the hyoid bone.

3) Soft tissue anatomy and anatomical formations of the neck.

Issues to be studied:

1) Parotid cysts and fistulas.

2) Lateral and median neck cysts.

3) Dermoid and epidermoid cysts, etc.

4) Timely diagnosis of malignant tumors of maxillofacial region.

5) Clinic, diagnosis, differential diagnosis of cysts and fistulas.

6) Surgical treatment.

Congenital tumor-like formations of the maxillofacial region and neck in children include dermoid and epidermoid cysts, median and lateral cysts (fistulas) of the neck, as well as parotid fistulas, etc.

Dermoid cyst is a congenital dysontogenetic formation originating from the ectoderm as a result of its malformation. Clinically, dermoid cysts are localized most often along the lines of fusion, where there were cracks or folds of the ectoderm at the stage of embryonic development of the organism. In the maxillofacial region, dermoids can be located at the bottom of the oral cavity along the midline, under the tongue, at the root of the nose between the eyebrows, near the wings of the nose, in the upper-outer edge of the orbit and less often in other places. Clinically, a dermoid is a formation rounded shape, elastic, painless on palpation, not soldered to the skin and surrounding tissues. The skin and mucosa above it are not changed in color. However, when localized in the area of the root of the nose and the upper-outer edge of the orbit, the formation is intimately connected with the periosteum. In this case, it should be differentiated from a cerebral hernia by diagnostic puncture, X-ray examination and consultation with a neurosurgeon. The dermoid grows slowly, imperceptibly, practically does not catch up.

As a rule, dermoid cysts of the bottom of the oral cavity are found in older children when the tumor reaches large sizes. The shell of the dermoid cyst is represented by the dermis, i.e. it is built in the same way as the skin, and has hair follicles, sebaceous and sweat glands. Dermoid cysts inside contain skin waste products: sebum, hair, exfoliated epidermis, an admixture of serous fluid, cholesterol crystals.

Treatment of dermoid cysts is exclusively surgical – removal of the formation together with the shell (cystectomy). Operative access is determined by the peculiarities of cyst localization.

An epidermoid cyst is a congenital dysontogenetic formation of ectodermal nature, formed from the detached epithelium during the closure of the gill arches. Thus, an epidermoid cyst does not differ in the mechanism of occurrence from a dermoid cyst. They are somewhat more common than dermoid cysts. They are localized mainly in the area of the anterior part of the bottom of the oral cavity. Clinically, they are a soft, painless formation, not soldered to the skin and surrounding tissues. The skin above the cyst is not changed in color. It grows slowly, practically does not catch up. The epidermoid cyst shell is thin and covered with a multi-layered squamous epithelium (epidermis). The contents of the cyst are yellow liquid with cholesterol crystals and exfoliated epithelial cells (keratin scales). Ultrasound, puncture biopsy, and contrast cystography are possible to clarify the diagnosis. This makes it possible to determine the volume of education and its localization in order to draw up a surgical intervention plan. An epidermoid cyst should be differentiated primarily with a wounded and (or) cyst of the submandibular salivary gland, as well as with a cystic form of lymphangioma. Treatment of epidermoid cysts is surgical - removal of the formation together with the shell (cystectomy). Since the shell the cysts are thin, then the operation is somewhat more complicated than when removing the dermoid.

The median cyst (fistula) of the neck is a congenital formation developing from the remnants of a reduced thyroid-lingual duct, which is present in the embryo during the development of the thyroid gland. With normal fetal development at the end of the 4th week of intrauterine development, this duct undergoes reverse development and gradually disappears completely, leaving a blind hole in the root of the tongue. If the thyroid-lingual duct does not completely reduce, it is the source of the occurrence of median cysts and neck fistulas. In childhood, pathology is very common.

Median neck cysts can be localized in any area thyroid-lingual duct: both from the blind opening of the tongue to the hyoid bone, and below - from the body of the hyoid bone to the isthmus thyroid gland (much more often). The cyst grows slowly, painlessly, but has a tendency to suppuration or inflammation, which often manifests itself clinically. In case of inflammation, it should be differentiated primarily with lymphadenitis of the subcutaneous region. Clinically (outside of inflammation) is a soft, elastic formation of a rounded shape, not soldered to the skin and surrounding tissues, but having a close connection with the body of the hyoid bone. It is usually

diagnosed no earlier than 2-3 yearsof age. It is localized along the midline of the neck at the level of the hyoid bone above or (more often) below it. When swallowing, the formation shifts only upwards, following the hyoid bone. To clarify the diagnosis, it is possible to perform ultrasound, diagnostic puncture (the cyst contains a light viscous secret) or contrast cystography.

Treatment of median neck cysts is surgical. By a transverse incision at the level of the hyoid bone body, the cyst shell is isolated and a part of the hyoid bone body is resected, with which the cyst shell is closely soldered. In some cases, the fistula course coming from the cyst can perforate the body of the hyoid bone and continue to the "blind" hole of the root of the tongue. In this case, the fistula should also be completely excised.

Median fistula of the neck is a congenital formation, the mechanism of occurrence is no different from the median cyst of the neck. It is diagnosed immediately after birth or in the first months or years of a child's life. In many cases, a fistula forms a second time, with suppuration of the median cyst of the neck. However, congenital neck fistula can also be an independent disease. The external opening of the fistula is usually located below the body of the hyoid bone, closer to the midline of the neck. The skin around the mouth of the fistula is macerated, hyperemic, sometimes scarred. Palpation determines the weight leading to the body of the sublingual bones. The mouth of the fistula periodically opens, and a mucous secret is secreted from the fistula, sometimes with pus in small amounts. The fistula can be complete (from the skin on the neck to the "blind" opening of the tongue) and incomplete, internal or external (from the skin on the neck or from the root of the tongue to the body of the hyoid bone). With a complete fistula, 1% methylene blue injected into the neck pours out of the "blind" opening of the tongue into the oral cavity. To clarify the diagnosis and draw up a surgical intervention plan, contrast fistulography is possible. Treatment of median neck fistulas surgical - excision of the fistula throughout with resection of a part of the body of the hyoid bone.

A lateral cyst (fistula) of the neck is a congenital formation of branchiogenic origin, originating from the epithelial remains of the gill arches or the goiter-pharyngeal duct. Rudimentary epithelial remains of the gill apparatus of the second gill slit or the third pharyngeal pocket and the goiter-pharyngeal duct in the lateral parts of the neck remain latent for a long time.

Despite the fact that the formation is congenital, it manifests itself clinically more often in adolescence under the influence of inflammation, trauma or endocrine glands. Cysts grow slowly, they are localized in the middle third of the neck in the area of the "sleepy" triangle, in front of the nodding muscle. Clinically, the formation is soft, painless, rounded, not soldered to the skin and surrounding tissues, of various sizes (from 3-4 cm or more). The skin above it is not changed in color. However, the lateral cysts of the neck have a tendency to suppuration, simulating in this case an

abscess clinic or lateral phlegmon neck surfaces. After opening a cyst or an independent breakthrough of pus, a lateral fistula of the neck may form. To clarify the diagnosis, ultrasound, diagnostic puncture and (or) contrast cystography may be performed. The cyst cavity contains a yellowish liquid. Cytological examination of the punctate reveals epithelial cells with signs of keratinization, lymphocytes, cholesterol crystals. Differentiate the lateral cysts of the neck with lymphadenitis, cystic form of lymphangioma, aneurysm of the vessels of the neck, tumors of the parotid and submandibular salivary glands, etc.

Treatment of lateral cysts of the neck is surgical - cystectomy, i.e. removal of the cyst together with the shell. Since the cyst shell is closely connected with the neurovascular bundle of the neck, especially with the internal jugular vein, the operation presents certain difficulties. When the cyst is inflamed, measures are first taken to stop the inflammatory process, and then (in a quiet period) a cystectomy is performed.

A lateral fistula of the neck is a congenital formation originating from the same embryonic rudiments as a cyst. It is formed most often secondarily, as a result of suppuration of the cyst, but it can also be a primary congenital disease. In this case, it is clinically manifested much earlier than cysts, sometimes in the first months of a child's life. There are complete and incomplete lateral fistulas of the neck. With a complete fistula, it continues from the skin of the lateral surface of the neck to the palatine tonsil or the lateral surface of the pharynx. Incomplete fistula ends blindly in the soft tissues of the neck. From the mouth of the fistula, which is located in front of the nodding muscle in the middle and lower third of it, periodically a liquid is released containing the exfoliated epithelium and lymphoid elements. The skin around the mouth is macerated, hyperemic, often scarred. Contrast fistulography is possible to clarify the diagnosis and draw up a surgical treatment plan. For the purpose of diagnosis, a 1% solution of methylene blue can be injected into the mouth of the fistula, in front of the nodding muscle, which can pour out in the area of the palatine tonsil. This indicates that the fistula is complete.

Treatment of lateral neck fistulas is surgical – excision of the fistula throughout. Surgery, especially with complete fistulas, often presents significant difficulties. For the successful operation, a 1% solution of methylene blue is injected into the fistula before the operation. With incomplete excision of the fistula, a relapse of the disease is possible.

Congenital parotid fistulas are usually found immediately after the birth of a child. The disease is often hereditary. Fistulas are localized more often in the anterior region, usually in front of the base of the auricle curl. Sometimes fistulas are combined with additional rudiments of the auricle. On palpation, a small amount of fat-like mass is released from the fistula. By palpation and probing, it can be determined that the fistula passages from the mouth on the skin are directed

posteriorly to the cartilaginous part of the external auditory canal. Sometimes the fistula opens into the external auditory canal. Fistulas are prone to inflammation, as a result of which the skin around the mouth of the fistula is hyperemic, macerated. Differential diagnosis is performed with salivary fistulas and subcutaneous granuloma.

Treatment of parotid fistulas is surgical - excision of fistulas throughout, often with a section of the cartilaginous base of the external auditory canal, which significantly complicates the operation. It is advisable to conduct it at preschool age (4-5 years).

Lesson #4

Topic: Tumors and tumor-like processes of soft tissues of the face, organs and mucous membrane of the oral cavity (hemangiomas, lymphangiomas, vascular dysplasia, neurofibromatosis, fibroids, papillomas, tumors of the salivary glands, etc.).

The purpose of the lesson: To study the clinic, diagnosis and treatment of benign tumors and tumor-like formations of soft tissues of the maxillofacial region in children.

Questions, knowledge of which is necessary to study this topic:

1) Anatomy of soft tissues of maxillofacial region in children.

2) Topographic anatomy of maxillofacial region.

3) Morphology and histology of benign soft tissue tumors

of epithelial and connective tissue nature.

4) Clinic and diagnosis of soft tissue tumors maxillofacial region.

Issues to be studied:

1) Classification, clinic, diagnosis.

2) Medical and surgical treatment of tumors and neoplasms.

3) Diathermoelectrocoagulation, sclerosing therapy.

4) Computed tomography of tumors and tumor-like formations.

5) Differential diagnosis of tumors and tumor-like formations.

6) Medicinal preparations used in the treatment of tumors and tumor-like formations of soft tissues of maxillofacial region.

7) Hospitalization: emergency, planned.

Children with benign formations of the oral cavity make up 4.9% of the total number of surgical patients. More often, tumors are detected at the age of 1 year, which indicates their dysontogenetic origin. The further peak of morbidity is manifested at the age of 12-16 years, which is associated with increased endocrine activity.

The predominant type of oral neoplasms in children are tumor-like (62.6%), more common in girls.

The tumor is usually localized in the area of the upper lip, corner of the mouth, tongue, hard and soft forehead.

Tumor-like formations are in the lower lip, sublingual area, on the mucosa of the alveolar process.

The largest number of neoplasms occurs from epithelial tissue (multilayer squamous epithelium, glandular epithelium, tooth-forming epithelium).

Among epithelial tumors from multilayered squamous epithelium papillomas are more common, which occupy the second place in frequency after vascular tumors in the oral cavity in children.

Papilloma is a papillary formation more often on a pedicle or on a wide base, somewhat paler or brighter in color than the color of the surrounding mucous membrane. In this form, it is not difficult to diagnose. But a papilloma can have a perfectly smooth, shiny surface, and then it needs to be differentiated from a fibroma. Often in such cases, the correct diagnosis can be made only after a histological examination.

A feature of papillomas is the increased mitotic activity of the epithelium around their base, therefore they must be removed from the underlying base in order to avoid relapse.

Papillomatosis is more often observed in children aged 7-12 years, which speaks in favor of postnatal origin. It may have a viral, reactive, traumatic neoplastic etiology.

Papillomatosis is a multiple overgrowth on the mucous membrane of the cheeks, lips, tongue, hard and soft palate in the form of a formation on a wide base, often with a smooth surface, painless on palpation, the color corresponds to the color of the surrounding mucous membrane or somewhat paler.

Treatment depends on the etiology (antiviral, exclusion of the traumatic factor, surgical).

If papillomatosis is more common in girls, then dermoid and epidermoid cysts are more common in boys. They have some kind of genetic etiology and often manifest themselves immediately after the birth of a child.

A special subgroup consists of benign pigmented tumors - nevi, which occur on the mucous membrane of the oral cavity extremely rarely and manifest themselves at the age of 1-3 years. This is a blue nevus, which can have a color from pale blue to dark blue. It usually has an irregular shape in the form of a spot that does not rise above the surface of the mucous membrane. Size from 0.3 to 1 cm in diameter.

The group of rare tumors in children in the oral cavity includes tumors from the glandular epithelium. They occur in children of older age groups, more often 12-16 years old.

Adenomas, pleomorphic adenomas are more common in large salivary glands: parotid and submandibular, as well as small glands of soft and hard neb. The tumor develops in the form of a single node, grows slowly without germinating the surrounding tissues, has a thin fibrous capsule, does not metastasize, and is prone to relapses.

Mucoepidermoid tumor in its structure can be low-differentiated, moderately differentiated and highly differentiated. It has infiltrative growth. With low-differentiated forms, a recurrence of the tumor is possible. The intervention is combined with radiation therapy.

Tumor-like neoplasms from a multilayer flat epithelium belong to rare formations of the oral cavity in children.

Epidermoid cysts in infancy are more often detected in the area of the excretory duct of the submandibular and sublingual salivary glands or in the uvulae area. They can simulate an abscess, as they have an oval shape of yellow formation. Dimensions 0,5-0,7- 1 cm in diameter. Dermoid and epidermoid cysts of the bottom of the oral cavity are detected at a later age - 4-6 years. They usually occupy the entire sublingual area. Treatment of dermoid and epidermoid cysts is surgical.

Tumor-like neoplasms from the glandular epithelium occupy the first place in frequency among tumors and tumor -like formations of the oral cavity in children. The most common are retention cysts of the small salivary glands, retention cysts of the Blonde-Nungland. Retention cysts of the sublingual salivary gland are less common.

Retention cysts of both large and small salivary glands are more common in children aged 7-12 years. Retention cysts of the small salivary glands are more often localized in the lower lip area and are the result of a momentary or chronic injury. They are a rounded formation on a wide base, the mucosa above them is thinned, the liquid contents are translucent. Size from 0.3 x 0.3 to 1x1 cm in diameter. Periodically, the cyst may open, the contents expire, and it disappears, but then it may reappear. Treatment of retention cysts of small salivary glands is surgical.

The greatest difficulties in diagnosis and treatment are retention cysts of the Blonde gland, located in the anterior 1/3 of the tongue on its lower surface. They need to be

differentiated with fibroids and papillomas of this localization, since cysts of this localization often open and lose the signs of a retention cyst. During surgical treatment of a cyst, it is necessary to carefully remove all adjacent lobules of the gland within the wound in order to avoid relapse.

Retention cysts of the sublingual salivary gland. They are more common in boys aged 7-12 years. The cause of cysts is injury or inflammation (sialadenitis). Retention cyst of the sublingual salivary gland is a formation of a rounded or oval shape along the excretory duct. The mucous membrane above it is sharply thinned, the liquid contents shine through. Size from 0.5x0.5 to 2.5x3.5 cm. It is necessary to differentiate retention cysts of the sublingual salivary gland with lymphangioma of this localization. Lymphangioma usually spreads to the opposite side of the sublingual area, as well as dermoid and epidermoid cysts.

Retention cysts require surgical treatment – removal of the cyst together with the gland (cystadenectomy).

The tooth-forming epithelium in the oral cavity in children serves as a source of tumor-like formations - the Serre glands.

The Serre glands are the result of dysontogenesis and are detected before the age of 1 year. In girls, they are observed more often.

The Serre glands are localized in the mucosa of the alveolar processes of the upper and lower jaws. They are a rounded formation on a wide base of a yellowish-whitish color ranging in size from 0.2x0.2 to 0.5x0.5 cm, of a dense consistency, painless on palpation. Their number can be from 1 to 3, 4, 5. They can be located on the alveolar process of one or both jaws.

Diagnosis of the Serre glands is difficult, since they belong to a group of rare formations of the oral cavity. It is necessary to differentiate them with fibroids and papillomas. The Serra glands do not require treatment, since they undergo involution at the 1st year of life, but they can persist at an older age.

Connective tissue tumors and tumor-like formations occupy the 3rd place in frequency after vascular and epithelial formations. Tumors of connective tissue origin. Fibroids can be of dysontogenetic and postnatal origin. They manifest themselves either before 1 year of life, or more often at the age of 12-16 years, less often 7-12 years. Fibroids are localized more often in the area of the tongue, lower lip, hard and soft nub, less often on the alveolar process, in the area of the upper lip, cheek. Fibroma is the formation of a rounded, oval, elongated, irregular shape on a wide base or on a leg. Fibroids can be single, multiple (2-3 pcs.). The color corresponds to the surrounding mucous membrane. In density from soft to dense consistency. Size from 0.3 to 1.5-2 cm in diameter. Palpation is painless. Growth is slow. Treatment is surgical, relapse is not given. Myoblastomyoma and myxoma belong to a group of rare formations of the oral cavity. Myoblastomyomas are of

dysontogenetic origin and manifest themselves immediately after the birth of a child. They are localized more often in the area of of the tongue, but may be in the area of the soft forehead and lower lip. They occur in the form of single or multiple formations on a broad base of whitish-pinkish color with a shiny smooth surface. Size from 0.2x0.2 to 0.5x0.5 cm.

Myxoma is a tumor of postnatal origin, consisting of mucous tissue. In the oral cavity, they are extremely rare in older children - 7-12 years old and 12-16 years old. Myxoma is a tumor of a rounded or angular shape of dirty gray or yellowish color, indistinctly delimited, soft consistency. Myoblastomyoma and myxoma are capable of malignancy, therefore, during surgical excision, it is recommended to remove them together with healthy tissue. Tumor-like formations of connective tissue origin. Fibromatosis is an overgrowth of dense fibrous tissue covering alveolar process from the vestibular and lingual sides. Etiology: endocrine disorders, trauma. Fibromatosis may be hereditary. It is usually found in girls aged 7-12 years and older.

There are two forms: local, when the growths are determined in the area of the group of teeth, and diffuse, in which the growths occupy the entire surface of the alveolar processes of the upper and lower jaws. Surgical treatment: in the local form - simultaneous removal of growths, in the diffuse form - gradual excision is performed within healthy tissues together with the periosteum.

Pyogenic granuloma is a cyanotic, purplish, lumpy formation, with elements of necrosis, soft consistency, easily bleeding when touched. Is an overgrowth granulation tissue in response to the introduction of infection into the wound surface. It grows very fast. It is located in the area of the lips, tongue, cheeks. The treatment is surgical. No relapse was noted.

Epulis occupy the second place in frequency among tumor-like formations after retention cysts. They occur in the postnatal period, more often in children aged 12-16 years, less often 7-12 years.

There are three types of epulis.

• Fibrous (fibroma of the alveolar process). It is a dense formation on a wide base or on a leg, painless on palpation, the color corresponds to the color of the surrounding mucous membrane. Size from 0.3 to 1-1.5 cm in diameter. Excised within healthy tissues to the bone.

• Angiomatous (angioma of the alveolar process). It is a formation of red, bluish color, soft consistency, easily bleeding on palpation, painless. Size from 0.3 to 2-3 cm in diameter. There may be minor changes on the R-gram destructive in nature. Excised within healthy tissues.

• Peripheral gigantocellular granuloma - formation of a bluish- purple color, dense consistency, painless on palpation. The destruction of bone tissue is determined on

the X-ray. It is removed within healthy tissues with the removal of destroyed bone tissue (partial resection of the alveolar process).

Questions of test control for a practical lesson:

1. Children with chronic parenchymal mumps have a history of acute epidemic mumps:

1) always;

2) sometimes;

3) never;

4) extremely rare;

5) only in children with concomitant pathology of LOR organs.

2. Chronic parenchymal mumps disease

1) airborne;

2) non-contagious;

3) sexually transmitted;

4) having a vertical transmission path;

5) hereditary.

3. For acute mumps, symmetrical lesion of both glands

1) it is always characteristic;

2) not typical;

3) typical only for children with respiratory pathology;

4) typical only for children with pathology of LOR organs;

5) typical only for children with gastrointestinal pathology.

4. For chronic parenchymal mumps, a symmetrical lesion both salivary glands are a sign of:

1) mandatory;

2) optional;

3) mandatory only for children with respiratory pathology;

4) mandatory only for children with pathology of LOR organs;

5) mandatory only for children with gastrointestinal pathology.

5. Symmetrical lesion of both parotid salivary glands is more characteristic of mumps

1) chronic parenchymal in remission;

2) acute epidemic;

3) calculous;

4) newborns;

5) chronic parenchymal in the acute stage.

Lesson #5

Topic: Tumors and tumor-like processes of facial bones, in children. Bone cysts. Clinic of individual nosological forms of benign and malignant neoplasms and tumor-like processes. Oncological alertness of a pediatric dentist. Comprehensive rehabilitation of children with neoplasms of the maxillofacial region.

The purpose of the lesson: To study the clinic, diagnosis, treatment of bone cysts, tumors and tumor-like processes of facial bones, indications for surgical treatment of tumor-like lesions of the bones of the facial skeleton.

Questions, knowledge of which is necessary to study this topic:

1) Anatomy of facial bones.

2) Topographic anatomy of cellular spaces adjacent to the jaw bones.

3) Pathological anatomy: morphology of tumor-like lesions of the bones of the facial skeleton.

4) Radiological characteristics of tumors of the jaw bones.

Issues to be studied:

1) Clinic, diagnosis, differential diagnosis of tumors and tumor-like processes of facial bones.

2) Etiology, pathogenesis.

3) Nomenclature and classification of tumors of the jaw bones.

4) Characteristic morphological differences of the main types of tumors of the jaw bones, principles of differential morphological diagnosis.

5) Treatment and rehabilitation of children with tumors and tumor-like processes of facial bones.

BONE TUMORS AND TUMOR-LIKE LESIONS

Bone tumors arise primarily in the bone and develop from the connective tissue elements that make up its composition. Bone-forming tumors form tumor bone tissue during their development.

Osteoma. A benign tumor from mature bone tissue. According to the structure of tumor tissue, osteoma can be compact and spongy. By localization, they can have a central and peripheral location. Osteomas are more common in the upper jaw. In most cases, the paranasal sinuses are involved in the process. Osteomas grow extremely slowly, but in isolated cases their growth rates vary. The clinical picture is poorly expressed. The symptoms are determined by the localization, size and direction of tumor growth.

Osteoma treatment is only surgical. The operation is indicated in cases where aesthetic and functional disorders occur. Cytological examination in osteomas is uninformative. When osteoma is diagnosed in the case of its asymptomatic course, the patient should be under dynamic observation with an examination every 6 months.

Osteoblastoma and osteoid osteoma are two tumors that are closely related to each other. They have the same microscopic structure and there are no specific microscopic features that distinguish them. The differences between them are manifested in different sizes and localization, different X-ray picture and reaction of nearby bone areas, various clinical symptoms and course. A distinctive feature of osteoblastoma is the almost complete absence of any zone of reactive bone formation (zone of reactive sclerosis).

Osteoblastoma is a benign osteoblastic tumor, similar in histological structure to osteoid osteoma, but differing in clinical manifestations. It is located in the spongy substance of bone tissue and is characterized by large sizes. There is no zone of reactive bone formation in the surrounding bone. Deformity of the jaw and changes in the oral mucosa, pain syndrome, as a rule, are absent.

Treatment is surgical, it is possible to remove the tumor by curettage. Morphologically, the tumor is constructed from primitive osteoid and weakly calcified beams that form a disordered network. In the loops formed by these bone structures, there is a richly vascularized cellular fibrous tissue. Cellular elements of connective tissue are represented by fibroblasts, numerous osteoblasts and single osteoclasts.

Giant cell tumors are most common among other benign formations of the facial skeleton in children. The greatest frequency of GCT lesions is observed in the age groups of 4-7 years and 7-12 years with a predominance of males and a predominant localization on the lower jaw.

Clinical and radiological manifestations of GCT are diverse and depend on the morphological structure of the tumor and changes in its structure (including changes of a dystrophic nature) that occur as the formation grows.

Cytological examination is a fairly informative method. In 75% of cases, the result of cytological examination corresponds to the pathomorphological diagnosis. The result of cytological examination should always be interpreted taking into account the data of clinical and radiological examination.

Treatment. The only method used in the treatment of GCT of any localization should be surgical - removal of the formation with resection of the corresponding fragment of the upper or lower jaw. Performing operations such as scraping in children is unacceptable. Teeth or rudiments of teeth adjacent to the lesion must be removed.

Ossifying fibroma. The clinical picture of ossifying fibroma resembles monossal fibrous dysplasia. However, unlike her, the tumor grows much faster. Teeth in the area of the tumor location are displaced. The tumor causes swelling of the jaw, displacement and thinning of the cortical layer.

The X-ray picture is uncharacteristic and more resembles a picture of fibrous dysplasia. Regardless of the size and localization, the tumor is always well delimited. Treatment - the use of a gentle approach in treatment (scraping) often gives relapses.

Fibrotic dysplasia is a developmental defect, biologically close to true tumors. Pathological foci are characterized by autonomous growth, the possibility of recurrence with incomplete removal. Morphological examination of pathological foci in children reveals polymorphism of cellular elements and increased mitotic activity. Often the disease is asymptomatic for a long time. According to the nature of changes in the bone, there are focal and diffuse forms. The focal form occurs as a single lesion of one of the jaws, and multi-focal lesions on one or different jaws.

Cherubism is a peculiar form of fibrous dysplasia, characterized by the familial and hereditary nature of the lesion. The disease is not transmitted from one parent to all children, there may be healthy children in the offspring. The lesion occurs in one or many generations. There is no sexual selectivity in inheritance. One of the characteristic signs of the disease is a symmetrical lesion of the jaw bones. In some periods of the disease, a more rapid development of one of the sides may prevail, facial asymmetry occurs. The period of the most intensive growth pathological foci - 57 years. With the onset of puberty , the process stabilizes and there is a tendency to intensive bone formation, ending with the construction of a normal bone. In the clinical picture, in addition to asymmetry, the consequences of impaired dental formation are observed: adentia, retention of teeth, dystopia and early tooth loss.

Morphologically, there are growths of fibrous tissue (often with the phenomena of myxomatosis) and a pronounced osteoclastic reaction. Treatment. Surgical

intervention is resorted to in case of a violation of the function caused by the growth of a pathological focus; social maladaptation of the child.

Albright syndrome is considered by most researchers as one of the forms of fibrous dysplasia, which consists in a combination of early puberty with intense pigmentation of some areas of the skin and scattered foci in the bones of the skeleton. Bone lesions

"Brown tumor" hyperparathyroidism. A systemic disease that develops as a result of a tumor of the parathyroid gland that secretes an excessive amount of parathyroid hormone. The process is characterized by bone restructuring in the form of significant resorption of it and the construction of primitive bone beams. Bone resorption prevails over the formation of dense structures, proliferation of osteogenic tissue leads to the emergence of giant cell growths, in which serous and blood cysts are formed. Bone changes lead to deformation, curvature, pathological fracture. Due to the increased release of calcium salts, changes occur in the internal organs (I.S. Karapetyan).are an embryonic defect of the transformation of mesenchyma into bone tissue.

Treatment is surgical, by an endocrinologist (removal of a tumor of the parathyroid glands). With functional and aesthetic disorders - scraping of pathological tissue in the jaw bones.

The central giant cell reparative granuloma is a tumor-like formation. Its important diagnostic feature is the lack of mobility of the formation associated with the presence of a wide base of the tumor. The formation can be characterized by rapid growth, from the very beginning of its appearance, significant deformation of the affected area of the jaw, loosening of intact teeth, malocclusion. Surgical treatment of this formation should also be carried out quite radically, with the removal of teeth located or adjacent to the tissue of the formation.

ODONTOGENIC TUMORS AND TUMOR-LIKE

LESIONS OF THE JAW BONES

Ameloblastoma (adamantinoma) is an odontogenic epithelial tumor, the structure of which is similar to the structure of the tissue of the enamel organ of the dental rudiment. Ameloblastoma has the ability to grow invasively. In most cases, it is diagnosed in children after 10 years old, but can occur even in infancy. The lower jaw is affected more often (the area of large molars, angle and branch) than the upper one. Manifestations of ameloblastoma are not very characteristic. The clinical signs are similar to those of an odontogenic cyst. X-ray picture variable. According to the literature, based on the comparison of X-ray and morphological studies, it is shown that the tumor tissue is detected beyond the boundaries determined by the radiograph. Thus, the X-ray method does not reveal the true boundaries of the tumor.

The course of ameloblastomas is non-aggressive. In some cases, ameloblastomas are manifested by signs of high aggressiveness - the growth of the tumor into the

surrounding soft tissues. The most common is the polycystic nature of the lesion. Monocystic lesion is extremely rare. Cytological examination is not informative enough, and differential diagnosis based on the paragraph is not possible. The microscopic picture of the structure is diverse not only in different tumors, but also in different areas of the same tumor.

There are the following variants of histological structure: follicular, plexiform, acanthomatous, basal-cellular, granular-cellular.

The leading method of treatment is the removal of the formation with resection of the corresponding part of the jaw bone.

Ameloblastic fibroma. Clinical and radiological manifestations of ameloblastic fibroma are uncharacteristic and resemble ameloblastoma. Ameloblastic fibroids consist of low-grade dental tissues that are found only in the dental rudiments. Unlike ameloblastoma, ameloblastic fibroids occur during the development and formation of permanent teeth. Sometimes dental conglomerates, which are poorly differentiated rudiments of teeth, are detected on radiographs in the tumor. Treatment - surgical - resection of the affected jaw. By histological examination is characterized by the presence of epithelial growths similar to those in ameloblastoma, and loose fibrous connective tissue.

Adenoameloblastoma. A rare benign tumor. Clinical and radiological manifestations correspond to a follicular cyst. Macroscopically, the shell is thicker than with follicular cysts. Diagnosis is possible only after a pathomorphological examination of the biopsy material. It is more often localized on the upper jaw in the canine region. In the area of the tumor, uncut teeth are detected, more often fangs. It grows quite slowly. It is well separated from the surrounding tissues, encapsulated. Radiologically represented by a cyst- like zone of enlightenment without clear boundaries. There is no sclerotic rim along the edge. Against the background of homogeneous enlightenment, calcifications can be determined in the wall zone.

Calcifying odontogenic cyst. According to the literature, the tumor occurs in a reduced enamel epithelium and consists of several layers of epithelial cells with foci of mineralization and fibrous stroma. It is more often localized in the area of premolars and molars. It may have a connection with uncut teeth. Differential diagnosis is quite complicated, and the diagnosis is established only after morphological examination of the biopsy material. Treatment - due to frequent recurrence after curettage, more radical operations are indicated.

Odontoameloblastoma. A rare benign tumor. Clinical and radiological manifestations resemble ameloblastoma, differing in the presence of dentin- and enamel-like inclusions in the tumor. Treatment is surgical. It is possible to remove the tumor by scraping with subsequent treatment of bone tissue.

Odontoma is a malformation of dental tissues. According to the structure, simple, compound and complex odontomes are distinguished. Most often, odontoma manifests itself during teething. The growth of the odontoma is self-limited, associated with the end of the formation and eruption of teeth. Clinically, deformity of the jaw bones is rarely detected. The most characteristic clinical sign is the delay in eruption of permanent teeth. Treatment of odontoma is surgical - curettage (together with a capsule) or resection. There are indications of the possibility of preserving teeth or rudiments of teeth displaced by an odontoma. The sections are determined by teeth and small tooth-like formations with a normal topographic arrangement of enamel, dentin, cement and at the same time conglomerates of dental tissues having a perverted arrangement of dental structures. Around the tumor there is usually a capsule consisting of coarse fibrous tissue, sometimes with the inclusion of dental tissues.

Fibroma (odontogenic fibroma). The tumor, as a rule, develops slowly, the pain is uncharacteristic. In the process of tumor growth, teething is disrupted. The main distinguishing feature of odontogenic fibroma is the presence of remnants of the tooth-forming epithelium in the connective tissue mass of the tumor. The clinical picture is nonspecific. Morphologically, it is represented by rare, small islands of tooth-forming epithelium among the connective tissue mass of the tumor.

Myxoma (myxofibroma). A rare tumor of the jaw bones. The source of its development in the jaw bones are reserve undifferentiated mesenchymal cells, the place of concentration of which are dental rudiments. The clinical picture is poor in specific symptoms. The tumor has no capsule, there is no borderline sclerosis zone. Treatment is only surgical - resection within a healthy bone.

Cementoma is a neoplasm that occupies an intermediate position between the dysplastic process (cementodysplasia) and a true tumor originating from the pericement of teething teeth. Cement is almost always characterized by a connection with teeth, a calm nature of growth and a clear restriction of lesions from the surrounding tissue. However, in childhood, the clinical and radiological picture does not fit into this framework (the tendency to unlimited growth, the ability to relapse, not always detectable connection with teeth). Treatment. In order to avoid relapse, cementomas must be excised together with adjacent areas of bone tissue (partial or complete resection of the affected area).

JAW CYSTS

In the International Histological Classification of Tumors cysts are considered in two sections: "Non-epithelial cysts" and "Epithelial cysts".

A. Non-Epithelial cysts. 1. Aneurysmal cyst. 2. Simple bone cyst (traumatic, hemorrhagic).

B. Epithelial cysts (the result of malformation). 1. Odontogenic - primary cyst (keratocyst), gingival cyst, eruption cyst, tooth-containing cyst (follicular cyst). 2. Neodontogenic - incisor canal cysts, globulomaxillary, median palatine.

B. Inflammatory root cysts. 1. From a temporary tooth (unique and lateral periodontal). 2. From a permanent tooth (anal and lateral periodontal). 3. Residual.

EPITHELIAL CYSTS

Epithelial cysts are associated with a violation of the embryogenesis process and are a malformation of teeth and jaws. They are also called slit or fissural cysts. They are a cavity lined with epithelium. The most common are globulo-maxillary, median tender and nasolabial (incisor canal cyst) cysts.

A globulomaxillary cyst develops in the embryonic period from the remains of the epithelium at the confluence of the incisor bone and the lateral part of the alveolar process of the upper jaw. It can be located either between the lateral incisor and the canine, or between the central and lateral incisors.

They often proceed asymptomatically, since there is no bulging of the cortical plate at their location; the teeth adjacent to the cyst are intact. A cyst is often found by accident. Clinically manifested by an incorrect position of the lateral incisor, canine, or retention of the canine. Radiologically, the focus of destruction of the spindle-shaped bone tissue is determined, the roots of the forming teeth cover the cyst. Treatment - surgical - complete removal of the cyst shell.

The median palatine and nasolabial cyst (incisor canal cyst) are formed from the remnants of the epithelium of the nasolabial canal; they are located along the line of junction of the non-nasal processes of the upper jaw and in the area of the incisor canal.

They are rare in children. They are characterized by slow, asymptomatic growth, are detected during inflammation or often accidentally during radiography, as well as when large sizes are reached, when the crowns of the central incisors are displaced towards each other.

The clinical picture is characterized by the presence of an elastic bulge in the anterior part of the hard nub, along the course of the nub suture behind the central incisors. Rarely, swelling and thinning of the bone are also found in the vestibule of the oral cavity. On palpation, a rounded formation with a swell in the center is determined. The cyst is filled yellowish liquid with cholesterol crystals. Pathomorphologically, it has been established that the cyst shell is an epithelial lining consisting of a multilayer flat epithelium in the areas of the alveolar process and a ciliated epithelium in the areas of the cyst adjacent to the nasal cavity. Radiologically, the focus of destruction of bone tissue of a rounded, oval or pear-shaped shape is determined; the periodontal slits of the central incisors are preserved.

Differentiate these cysts from the subcostal abscess of the neb and cysts of the incisive papilla. Treatment - surgical - complete removal of the cyst shell.

A follicular (tooth-containing) cyst develops from the enamel organ of an uncut tooth, most often the lower third large molar or canine, less often the third large molar on the upper jaw. It is believed that follicular cysts arise as a result of an inflammatory process in the periodontium of temporary teeth, which passes to a permanent tooth located in the cyst cavity and is at one of the stages of development. The clinical picture is similar to the manifestation of other jaw cysts. The absence of one of the teeth in the dentition is characteristic; with the exception of is the development of a cyst from an overcomplicated tooth. Cases of ameloblastoma development from a follicular cyst are described. Radiologically, the focus of rarefaction of bone tissue with smooth and clear boundaries is determined, often with a rim of dense sclerosed bone at the edges. The tooth follicle can be included in the cyst cavity; or its crown can be immersed in the cyst up to the neck, and the root is located in the bone tissue.

Macroscopically, a follicular cyst is a single-chamber cavity lined with a shell and containing a yellowish a clear liquid with cholesterol crystals. Microscopically, the cyst shell is defined as a thin layer of connective tissue covered with a multilayer squamous epithelium.

Differentiate the follicular cyst from other jaw cysts and ameloblastoma. Treatment - surgical - complete removal of the cyst shell and the retinated tooth.

Keratocyst is a malformation of the dental epithelium, its source may be formations known as the Serra glands. These are clusters of epithelial cells that remain under the surface of the gum in the form of whitish spots and have not resolved after birth. Most often, keratocysts develop in the tooth-containing areas of the jaw or behind the third molar of the mandible with spreading to the branch. The tumor has aggressive behavior, is capable of destroying surrounding tissues, often recurs and can become malignant. Keratocyst develops imperceptibly and does not manifest itself for a long time. When a minor deformation of the jaw bones is detected, the cyst, as a rule, reaches large sizes. Keratocyst has a characteristic morphological pattern that distinguishes it from other cystic lesions of the jaw bones. Its wall is represented by a rather loose fibrous connective tissue, the inner surface is lined with a multilayer flat epithelium in 3-5 layers with a very characteristic basal layer, the cells of which are located strictly vertically with hyperchromic nuclei, forming a kind of "brush". Active proliferation of the epithelial lining of keratocysts, supported by secondary inflammation, causes relapses of the cyst, and can also contribute to the appearance of an odontogenic tumor in it, primarily ameloblastoma.

Multiple keratocysts are part of some syndromes: Gorlin-Golts, Marfan syndrome, Noonan syndrome.

Gorlin-Goltz syndrome. Hypertrichosis is noted in the area of the bridge of the nose, on the back of the nose, shortening of the upper third of the face due to a decrease in the hairline. The syndrome is accompanied by multiple basal cell and nevi. In addition, there is a funnel-shaped chest, hypertelorism, malformations of internal organs (kidneys, intestines).

NON-EPITHELIAL CYSTS

Aneurysmal cyst. Before isolation into an independent nosological form , such changes in bone tissue were interpreted as the outcome of a giant cell tumor. The bone lesion has no connection with the teeth. An asymptomatic clinical course is possible. In many cases, patients complain of toothache, less often of painless bone deformity. In some age periods, there may be a fairly rapid growth of cysts. Treatment - scraping operation gives reliable results.

A simple bone cyst (traumatic, hemorrhagic) occurs on the lower jaw in children during the period of intensive skeletal growth (12-14 years). They are detected by chance during X-ray examination, since they are not accompanied by deformation of the jaw. The pathogenesis has not been studied enough; it is believed that a simple bone cyst is the result of trauma or intensive growth of the skeleton, in which the spongy substance of the bone does not have time to rebuild and not fully mineralized bone cavities are formed. The cyst has no shell and liquid contents, in its the cavities are freely located bone trabeculae; in some cases, the cyst is filled with hemorrhagic contents. Radiologically, the focus of enlightenment is determined without clear boundaries, spreads along the spongy substance of the bone, has an oval-elongated shape with uneven contours; the roots of the teeth are projected against its background. The teeth are intact. Differentiate from inflammatory root cysts, giant cell tumor, ameloblastoma. Treatment is surgical.

Lesson # 6

Topic: Congenital pathology of the oral mucosa: low attachment of the upper lip frenulum, high attachment of the lower lip frenulum, short tongue frenulum, additional traction of the oral mucosa, shallow lower arch of the vestibule of the mouth. Operations performed in children's maxillofacial region in a polyclinic.

The purpose of the lesson: To study the etiology, clinic, diagnosis, principles of treatment of children with congenital pathology of the mucous membrane, short bridles of the lips and tongue, small vestibule of the oral cavity. Form a diagnosis and choose a treatment method.

Questions, knowledge of which is necessary to study this topic:

1) Anatomy of the maxillofacial region.

2) Histology, cytology, embryology. Development of the face and oral cavity.

3) Methods of X-ray examination in the maxillofacial region.

4) Methods of physiotherapeutic treatment in the maxillofacial region.

Issues to be studied:

1) A short bridle of the tongue.

2) Low attachment of the upper lip frenulum.

3) Small vestibule of the oral cavity.

4) Pierre-Robin syndrome, Hanhart syndrome.

5) Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment of mucosal pathology.

Anomalies of the oral mucosa are the most common congenital malformation. They can be the dominant type of abnormalities or a symptom of a more serious malformation (multiple congenital strands of the mucous membrane in the area of the arches of the vestibule of the mouth with oral-facial-finger syndrome).

A short bridle of the tongue. The frenulum of the tongue is the weight of the mucous membrane, the top of which is located on the lower surface of the tongue along the midline, then passing to the bottom of the mouth and located between the mouths of the excretory ducts of the submandibular and sublingual salivary glands. With its base, the frenulum of the tongue is attached to the inner surface of the alveolar process of the lower jaw (at any level), often forming additional strands of the mucous membrane in the form of a "crow's foot" here. Normally, the tip of the frenulum of the tongue is located at the level of its middle third, and the base is at the level of the base of the alveolar process. If the tip of the frenulum is attached in the area of the anterior third of the tongue or close to its tip, they speak of a short frenulum of the tongue. With such a frenulum, its base is usually located close to the top of the alveolar process.

In the area of the tip of the tongue, with a pronounced shortened frenulum, there is a retraction, a groove. In rare cases, the frenulum of the tongue is practically absent and the tip of the tongue is attached to the top of the alveolar process. This condition is referred to as ankyloglossia. Such anatomical disorders, which cause restriction of the mobility of the tongue, lead to functional disorders. In the first days after birth, a violation of the sucking function is detected. However, functional insufficiency of the tongue can be compensated by a large amount of milk in a nursing woman, which facilitates sucking. The same is observed when transferring a child for some reason to artificial feeding from the first days after birth. The malformation may remain undetected until the period of formation of the child's speech function. In these cases, a short frenulum of the tongue is often detected by a speech therapist. It should be

borne in mind that the speech disorder may be of central origin. In such cases, the question of surgical intervention on the bridle of the tongue is decided by a speech therapist (sometimes after consultation with a neuropsychiatrist).

A short frenulum of the tongue leads to local periodontitis in the area of the teeth 82, 81, 71, 72, 42, 41, 31, 32, violation of their position (lingual tilt, rotation along the axis) and contributes to the development of distal occlusion; it worsens the fixation of orthodontic plate devices and removable dentures on the lower jaw. Treatment of the short frenulum of the tongue is surgical. Indications for surgery: violation of the function of sucking (the issue of surgery should be decided jointly with the pediatrician), speech therapy (the decision is made by the speech therapist and surgeon), orthodontic and orthopedic, periodontal (the decision is made by the relevant specialists).

The operation in newborns and infants is performed under application anesthesia immediately before the next feeding by dissecting the frenulum over the mouths of the excretory ducts of the salivary glands with scissors. The tongue is held by a grooved probe. Immediately after the operation, the feeding of the child is shown. During the sucking function, the incision made on the frenulum of the tongue is naturally prolonged by the required amount. The operation of frenulum dissection in newborns and infants is palliative. In the future, as a rule, the child will have to planned surgery - plastic surgery of the frenulum of the tongue, including counter triangular flaps.

The procedure of the operation. After dissection of the frenulum of the tongue over the mouths of the excretory ducts of the salivary glands and the expansion of the wound in a blunt way in horizontal and vertical directions, a duplicate of the mucous membrane over the wound (the frenulum itself) is excised. The edges of the wound are mobilized, after which vicril sutures are applied to the mucous membrane in the vertical direction. A possible complication in the postoperative period — swelling of the tongue and the bottom of the mouth — makes it necessary to recommend monitoring the child in a hospital for one day and prescribing anti-inflammatory and hyposensitizing drugs (calcium gluconate, tavegil, suprastin or their other analogues). Recommended a gentle diet, restriction of speech function for 3-4 days, rinsing after eating with a weak antiseptic, cleaning the teeth of the lower jaw from the lingual side is not carried out until full recovery. If the operation was performed according to speech therapy indications, the child begins (or resumes) classes with a speech therapist on the 6th-7th day after the operation.

The short frenulum of the upper lip usually has a wide apex, close to the red border, and a wide base in the area of the alveolar process of the upper jaw. During a smile, the mucous layer is exposed, which causes cosmetic disorders. Low attachment of the frenulum of the upper lip is observed much more often, while the base of the frenulum can be located close to the top of the alveolar process and even

pass into the incisor papilla. Such an arrangement of the frenulum of the upper lip may accompany diastema, interfere with orthodontic and orthopedic treatment, and lead to local periodontitis. Thus, surgical intervention on the bridle of the upper lip is carried out according to cosmetic, orthodontic, orthopedic and periodontal indications. The operation is prescribed no earlier than after the complete eruption of 11, 21 teeth and partial — 12, 22. The best option for intervention is excision of the frenulum of the upper lip. The operation is performed under general anesthesia in a polyclinic.

The procedure of the operation. A V-shaped incision is made to the bone, bordering the base of the frenulum on the alveolar process. The exposed part of the alveolar process is skeletonized in a blunt way, if necessary, the bone protrusion in the area of the median suture is smoothed with an excavator or curettage spoon, a duplicate of the mucous membrane on the upper lip (the frenulum itself) is excised, the edges of the wound are mobilized, the mucous membrane on the upper lip is sutured with vicryl. An iodoform tampon or "Alvagel" is placed on the exposed bone. Upper lip fixed with a pressure bandage for 4-6 hours.

In the postoperative period, a gentle diet is recommended, mouthwash with weak antiseptics. Cleaning the teeth of the upper jaw from the vestibular side is not carried out until the wound on the alveolar process is completely healed. Changing the iodoform tampon is recommended for 7— the 8th day after the operation and repeated if necessary. If there are separate additional mucous cords in the upper or lower arch of the vestibule of the mouth, they can be eliminated (according to indications) in the same way.

Small vestibule of the mouth refers to abnormalities in the development of the mucous membrane of the arch of the vestibule and is characterized by a decrease in the height of the attached gum. The height of the attached gum in children is a variable value. It changes due to the growth of the alveolar part and the base of the lower jaw as the dental follicles develop and the eruption of first milk and then permanent teeth. The depth of the vestibule (the height of the attached gum) is equal to the distance from the gingival margin at the level of the midline of the corresponding tooth to the transitional fold without the size of the gingival groove.

The depth of the vestibule in children aged 6-7 years is 4-5 mm, at the age of 8-9 years — 6-8 mm, and by 13-15 years reaches 9-14 mm. The shallow vestibule of the mouth, the high attachment of the frenulum of the lower lip, the presence of pronounced additional strands in the mucosal-submucosal layer are factors predisposing to the development of catarrhal gingivitis first in the area of one or more teeth, and then local periodontitis. The development of the pathological process in periodontal tissues is also promoted by various kinds of orthodontic disorders (deep prognathic bite, sagittal dysocclusion, vestibular the position of individual teeth,

crowding of teeth, etc.), causing an uneven distribution of chewing load on periodontal tissues. A low level of oral hygiene aggravates the process.

Treatment of local periodontitis caused by the listed factors should be comprehensive: therapeutic, orthodontic, surgical, with mandatory observance of a high level of oral hygiene. Surgical treatment — vestibuloplasty - is aimed at deepening the vestibule of the oral cavity and eliminating mucosal-submucosal cords. In some cases, vestibuloplasty is performed in order to prevent periodontitis.

1) Hanhart syndrome: hypoplasia of the tongue, synechiae of the oral cavity, cleft palate, oligodontia, syndactyly and oligodactyly of the hands and feet, atresia of the anus.

2) Hanhart syndrome: aglossia, ignatia (fusion of the jaws), microstomy, syndactyly and polydactyly of the hands, bilateral sensorineural hearing loss.

Treatment of Hanhart syndrome requires joining forces of a group of pediatricians, surgeons, orthopedists and rehabilitologists to form a systematic treatment and recovery plan.

Newborns with Hanhart syndrome often have problems with feeding and breathing, which can lead to life-threatening conditions. It is necessary to establish safe feeding through a probe and breathing through an air outlet, in the most severe cases, surgical correction and prosthetics should be performed. Children with Hanhart syndrome may have difficulties in speech development, the severity of their dependence on anomalies of the oromandibular region. The first stage is surgical correction of the maxillofacial anomaly, the second stage- treatment by a speech therapist. The delay in the acquisition of motor skills by a child depends directly on the severity of limb malformations in this syndrome. It is possible to use artificial limbs instead of underdeveloped (missing) or prosthetics of parts of deformed limbs. It is very important to provide medical and genetic counseling to the family and further psychological and social support for the normal adaptation of children with Hanhart syndrome in society.

Questions of test control for a practical lesson:

1. FORMATION OF A CONGENITAL CLEFT OF THE UPPER LIP TERATOGENIC FACTORS CAN CAUSE DURING FETAL FORMATION

1) the first six weeks

2) the twelfth-sixteenth week

3) twenty–fourth - twenty-eighth week

4) the thirtieth-thirty-sixth week

5) thirty-second-thirty-eighth week

2. CONGENITAL CLEFTS OF THE UPPER LIP ARE FORMED IN THE PERIOD OF HUMAN EMBRYO DEVELOPMENT

1) third – sixth week

2) the eleventh – twelfth week

3) in the second half of embryogenesis

4) the sixth – eighth week

5) thirty-second-thirty-eighth week

3. A HUMAN EMBRYO HAS A CLEFT UPPER LIP AS PHYSIOLOGICAL NORM DURING EMBRYOGENESIS

1) the first six weeks

2) the sixteenth – eighteenth week

3) twenty-fourth – twenty-eighth weeks

4) tenth-sixteenth week

5) thirty-second-thirty-eighth week

4. A HUMAN EMBRYO HAS A CLEFT PALATE AS PHYSIOLOGICAL NORM DURING EMBRYOGENESIS

1) the first six weeks

2) the sixteenth – eighteenth week

3) twenty-fourth – twenty-eighth weeks

4) the thirtieth-thirty-sixth week

5) thirty-second-thirty-eighth week

5. TERATOGENIC FACTORS CAN CAUSE THE FORMATION OF CONGENITAL CLEFT PALATE DURING EMBRYOGENESIS

1) the first six weeks

2) the sixteenth – eighteenth week

3) twenty-fourth – twenty-eighth weeks

4) the thirtieth-thirty-sixth week

5) thirty-second-thirty-eighth week

6. TERATOGENIC ACTION LEADING TO FORMATION OF CONGENITAL CLEFT PALATE IN THE FETUS, POSSESS

1) excessive consumption of sweet foods by a pregnant woman

2) medications taken during pregnancy

3) pathological changes in the reproductive organs of a pregnant woman

4) increased blood pressure in the first trimester of pregnancy

5) dyspeptic phenomena in the second trimester of pregnancy

7. FROM THE PRIMARY PALATE IS FORMED

1) upper lip

2) upper lip and alveolar process of the upper jaw

3) the middle section of the upper lip and the incisor bone

4) the back of the nose and the nasal septum

5) lower lip and chin of the lower jaw

8. AT THE HEART OF THE PEDIATRIC SURGICAL PROCEDURE ADOPTED AT THE DEPARTMENT OF DENTISTRY AND MAXILLOFACIAL SURGERY CLASSIFICATION OF CONGENITAL CLEFT UPPER LIP THERE ARE SIGNS

1) anatomical

2) functional

3) anatomical and functional

4) anatomical, functional and clinical

5) clinical and anatomical

9. ACCORDING TO THE CLASSIFICATION ACCEPTED AT THE DEPARTMENT OF DENTISTRY AND MAXILLOFACIAL SURGERY CONGENITAL CLEFTS OF THE UPPER LIP ARE DISTINGUISHED CLEFT UPPER LIP

1) complete one-sided with deformation of the cutaneous cartilaginous part of the nose

2) incomplete one-sided without deformation of the skin-cartilaginous part of the nose

3) latent unilateral with deformation of the skin-cartilaginous part of the nose

4) complete without deformation of the skin-cartilaginous part of the nose

5) latent bilateral alveolar process

10. MEDICAL AND GENETIC COUNSELING IT IS RECOMMENDED TO THE RELATIVES OF THE PATIENT AND THE PATIENT WITH DIAGNOSIS

1) secondary deforming osteoarthritis of the temporomandibular joint

2) incomplete cleft of the soft palate

3) osteoma of the upper jaw

4) odontogenic inflammatory cyst

5) multiple caries

11. MEDICAL AND GENETIC COUNSELING IT IS RECOMMENDED TO THE RELATIVES OF THE PATIENT AND THE PATIENT WITH DIAGNOSIS

1) juvenile dysfunction of the temporomandibular joint

2) retention cyst of the lower lip mucosa

3) hidden cleft of the soft palate

4) fibroma of the lower jaw

5) short tongue bridle

12. TO ANATOMICAL DISORDERS THAT OCCUR WHEN CONGENITAL COMPLETE CLEFT OF THE UPPER LIP, REFERS TO

1) deformation of the skin-cartilaginous part of the nose

2) violation of sucking

3) rhinolalia

4) diplopia

5) hypertelorism

13. To obligatory ANATOMICAL DISORDERS HAVING A PLACE WITH A CONGENITAL HIDDEN CLEFT OF THE UPPER LIP, REFERS TO

1) speech disorder

2) deformation of the skin-cartilaginous part of the nose

3) shortening of the upper lip

4) macroglossia

5) absence of the upper arch of the vestibule of the oral cavity

14. TO MANDATORY ANATOMICAL DISORDERS, OCCURRING IN CONGENITAL INCOMPLETE CLEFT UPPER LIP, REFERS TO

1) deformation of the skin-cartilaginous part of the nose

2) rhinolalia

3) shortening of the upper lip

4) macroglossia

5) primary dental adentia 51, 61

15. WITH CONGENITAL CLEFT OF THE UPPER LIP SURGICAL TREATMENT IS RECOMMENDED TO BE CARRIED OUT IN THE AGE OF THE CHILD

1) 1-2 months

2) 4 – 6 months

3) 2 – 4 days

4) 11 – 12 days

5) 1-2 years

16. With congenital cleft of the upper lip, corrective operations on the wings of the nose, tip of the nose, nasal septum are recommended at the age of

1) 6 months

2) 2 – 3 years

3) 5 – 6 years

4) 8-10 years old

5) 12 – 16 years old

17. AT THE HEART OF THE CLASSIFICATION ADOPTED AT THE DEPARTMENT OF DENTISTRY AND MAXILLOFACIAL SURGERY CONGENITAL CLEFT PALATE ARE SIGNS OF

1) anatomical

2) clinical

3) functional

4) anatomical and clinical

5) anatomical, clinical and functional

18. ACCORDING TO THE CLASSIFICATION ACCEPTED AT THE DEPARTMENT OF DENTISTRY AND MAXILLOFACIAL SURGERY THERE IS A CONGENITAL CLEFT OF THE SOFT PALATE

1) hidden

2) one-sided

3) two-sided

4) hidden one-sided and two-sided

5) hidden double-sided

19. ACCORDING TO THE CLASSIFICATION ACCEPTED AT THE DEPARTMENT OF DENTISTRY AND MAXILLOFACIAL SURGERY THERE IS A CONGENITAL CLEFT OF THE SOFT PALATE

1) full

2) one-sided

3) two-sided

4) full one-sided

5) full double-sided

20. ACCORDING TO THE CLASSIFICATION ACCEPTED AT THE DEPARTMENT OF DENTISTRY AND MAXILLOFACIAL SURGERY THERE IS A CONGENITAL CLEFT OF THE SOFT PALATE

1) one-sided

2) two-sided

3) incomplete

4) incomplete one-sided

5) incomplete two-sided

21. ACCORDING TO THE CLASSIFICATION ACCEPTED AT THE DEPARTMENT OF DENTISTRY AND MAXILLOFACIAL SURGERY THERE IS A CONGENITAL CLEFT OF THE ALVEOLAR PROCESS AND ANTERIOR PART OF THE HARD PALATE

1) with or without deformation of the skin-cartilaginous part of the nose

2) unilateral with or without deformation of the skin-cartilaginous part of the nose and bilateral with or without deformation of the skin-cartilaginous part of the nose

3) full (one-sided or two-sided) and incomplete (one-sided or two-sided)

4) hidden double-sided

5) hidden one-way

22. REGARDLESS OF THE TYPE OF CONGENITAL CLEFT OF THE SOFT AND A VIOLATION OF THE FIRM PALATE IS MANDATORY FUNCTIONS

1) eating

2) speeches

3) breathing

4) urination

5) sucking

23. Surgical treatment for children with an isolated cleft of the soft palate is indicated at the age of

1) 4-6 months

2) 1-2 years

3) 4 – 5 years

4) 5 – 6 years

5) 12 years old

24. Surgical treatment for children with a complete cleft of the soft and hard palate is indicated at the age of

1) 4-6 months

2) one to two years

3) three to four years

4) five to six years

5) 10 years

25. Bone grafting of the cleft of the alveolar process for children with unilateral cleft of the alveolar process, hard and soft palate is shown at the age of

1) 1-2 years

2) 3 – 4 years

3) 5 – 6 years

4) 8 – 10 years

5) later than 16 years

26. IN CHILDREN AGED 9-10 YEARS, THE MOST FREQUENT THE INDICATION FOR SURGERY ON THE FRENULUM OF THE TONGUE IS

1) difficult eating

2) underdevelopment of the frontal part of the lower jaw

3) speech disorder

4) diastema

5) respiratory disorders

27. Bone grafting of the cleft of the alveolar process for children with bilateral cleft of the alveolar process, hard and soft palate is shown at the age of

1) six to eight months

2) one to two years

3) 4-5 years

4) 8-10 years old with bite adapted to this age period

5) 8 – 10 years

28. LOCAL PERIODONTITIS IS AN INDICATION FOR SURGICAL CORRECTION OF THE FRENULUM OF THE TONGUE AT THE AGE OF A CHILD

1) 5 – 6 years

2) 7 – 9 years old

3) 10-12 years old

4) any with a formed permanent bite

5) 10-12 years

29. EXCISION OF THE FRENULUM OF THE UPPER LIP BY ORTHODONTIC INDICATIONS SHOULD BE CARRIED OUT AT THE AGE OF THE CHILD

1) 3 – 4 years

2) 4 – 5 years

3) 5 – 6 years

4) 6 – 7 years

5) 7 – 8 years

30. THE CONSEQUENCE OF THE HIGH ATTACHMENT OF THE LOWER FRENULUM LIPS MAY APPEAR

1) flattening of the frontal part of the lower jaw

2) local periodontitis

3) speech defect

4) rhinolalia

5) shortening of the upper lip

31. PRIMARY PARTIAL ADENTIA IS ONE OF SYMPTOMS

1) congenital cleft of the upper lip

2) ectodermal dysplasia

3) hemifacial microsomy

4) Pierre-Robin syndrome

5) Kazabach-Merritt syndrome

32. UNDERDEVELOPMENT OF THE AURICLE IS A SYMPTOM

1) cherubism

2) Van der Wood syndrome

3) birth trauma of the temporomandibular joint

4) hemifacial microsomy

5) Down syndrome

33. THE ANTERIOR CUTANEOUS CARTILAGINOUS RUDIMENTS ARE A SYMPTOM

1) Goldenhar syndrome

2) Van der Wood syndrome

3) Albright syndrome

4) cherubim

5) Recklingausen diseases

34. WHEN THE FRENULUM OF THE UPPER LIP IS EXCISED, THE INDICATION TO COMPACTOSTEOTOMY IS

1) hypertrophy of the interdental papilla

2) diastema

3) attachment of the frenulum of the upper lip to the top of the alveolar process

4) rotation of the central incisors along the axis

5) gum recession in teeth 11, 21

35. SURGERY FOR A SHORT FRENULUM OF THE TONGUE BY SPEECH THERAPY INDICATIONS SHOULD BE CARRIED OUT IN THE AGE OF THE CHILD

1) 1 month

2) 1 year

3) 2 – 3 years

4) 4 – 5 years

5) 6 – 7 years

36. THE SIZE OF THE ATTACHED GUM IN THE LOWER THE ARCH OF THE VESTIBULE IS NORMALLY

1) 1.5 – 2.0 mm

2) 2.0 – 3.0 mm

3) 4.0 – 6.0 mm

4) more than 7.0 mm

5) more than 8.0 mm

37. AN INDICATION FOR DEEPENING THE SHALLOW VESTIBULE IS

1) atrophic gingivitis

2) the size of the attached gum is 3 – 4 mm

3) the size of the attached gum is less than 3 mm

4) crowding of teeth in the frontal part of the lower jaw

5) speech disorders

38. CONGENITAL MEDIAN NECK CYSTS ARE the result of non-infection

1) Meckel's duct

2) the thyroid duct

3) Vartonova duct

4) Stenon's duct

5) Virsung's duct

39. CONGENITAL MEDIAN CYSTS AND FISTULAS ALWAYS HAVE ANATOMICAL CONNECTION

1) with lower jaw

2) with palatine tonsil

3) with hyoid bone

4) with thyroid gland

5) with language

40. The most informative method of diagnosis of congenital median neck cysts

1) X-ray

2) thermal imaging

3) Ultrasound research

4) computed tomography

5) axiography

41. THE METHOD OF TREATMENT OF CONGENITAL MEDIAN CYST OF THE NECK IS

1) cryodestruction

2) surgical

3) radiation therapy

4) complex: surgical followed by radiation therapy

5) complex: surgical followed by chemotherapy

42. THE METHOD OF TREATMENT OF CONGENITAL LATERAL CYST OF THE NECK IS

1) surgical

2) complex: surgical followed by radiation therapy

3) cryodestruction

4) radiation therapy

5) sclerosing therapy

43. THE METHOD OF TREATMENT OF CONGENITAL MEDIAN FISTULA OF THE NECK IS

1) radiation therapy

2) cryodestruction

3) surgical

4) complex: surgical followed by radiation therapy

5) electrochemical lysis

44. CONGENITAL ANTERIOR FISTULAS ALWAYS HAVE A CONNECTION

1) with lower jaw

2) with palatine tonsil

3) with hyoid bone

4) with thyroid gland

5) with an external auditory canal

45. MEDICAL AND GENETIC CONSULTATION IS RECOMMENDED RELATIVES OF THE PATIENT AND THE PATIENT WITH THE DIAGNOSIS

1) odontogenic inflammatory cyst of the jaw

2) congenital bilateral cleft of the alveolar process, hard and soft palate

3) chronic recurrent parenchymal mumps

4) congenital hidden cleft of the upper lip

5) cherubism

46. Speech disorder with congenital latent cleft of the soft and hard the sky is caused by

1) shortening of the soft palate

2) expansion of the middle pharynx

3) akiloglossia

4) deformation of the dentition

5) low attachment of the upper bridle

47. When examining a child with a cyst of the tongue root before surgical treatment, consultation and examination by

1) ophthalmologist

2) gastroenterologist

3) endocrinologist

4) phthisiatrician

5) speech therapist

48. Robin syndrome is characterized by a triad of signs

1) cleft of the sky

2) underdevelopment of the lower jaw

3) glossoptosis

4) hypertelarism

5) hypoplasia of the auricle