ORGAN IS RESEARCHED, CONTAINING OF A LITTLE OF SEROUS AND MIXED SECRETORY UNITS, AND A PLENTY OF MUCOUS SECRETORY UNITS. WHAT ORGAN IS RESEARCHED?

SUBLINGUAL GLAND

**BUCCAL SALIVARY GLAND** 

**PAROTID** 

SUBMANDIBULAR GLAND

**GLAND OF A LIP** 

THE HYPEREMIA AND INCREASED SYNTHESIS OF MUCUS IN A NASAL CAVITY IS FOUND OUT IN THE PATIENT WITH AN ACUTE RHINITIS. ACTIVITY OF WHAT CELLS OF AN EPITHELIUM OF A NASAL MUCOSA IS INCREASED?

**GOBLET** 

**ENDOCRINE** 

**CELL WITH MICROVILLI** 

**BASAL** 

**CILIATED** 

UNDER THE CERTAIN CIRCUMSTANCES ON 5-TH MONTH AFTER BIRTH OF THE CHILD THE PROCESS OF DESTRUCTION OF AN EPITHELIAL SHEATH OF HERTWIG AROUND OF A TOOTH IS BROKEN. THE DEVELOPMENTOF WHAT TISSUE OF A TOOTH IS PREVENTED BY THIS CIRCUMSTANCE?

**CEMENTUM** 

**ENAMEL** 

**DENTAL PAPILLA** 

**DENTAL SAC** 

**PULP** 

ON A PERIPHERIC ZONE OF A TOOTH PULP ACTIVITY OF CELLS IS DISTURBED FOR THE CERTAIN REASONS. WHAT TISSUE OF A TOOTH HAS DEFICIENCY OF ITS PHYSIOLOGICAL REGENERATION?

**DENTINE** 

**ENAMEL** 

**PULP** 

**CELLULAR CEMENTUM** 

**ACELLULAR CEMENTUM** 

ON TWO SLIDES OF A TOOTH ARE SEEN: IN ONE - ACELLULAR CEMENTUM, IN THE ANOTHER - CELLULAR. FROM WHAT PART OF A TOOTH THE SECOND SLIDE IS PREPARED?

APEX OF A ROOT

SITE OF A TOOTH NECK

**CROWN OF A TOOTH** 

SITE OF BORDER BETWEEN A CROWN AND ROOT

TOP SITE OF A TOOTH

AT EXAM, ANSWERING ON A QUESTION ON DEVELOPMENT OF HARD AND SOFT TISSUES OF A TOOTH, THE STUDENT WAS MISTAKEN, WHEN HAS TOLD, THAT THE ENAMEL IS FORMED BY CELLS OF A MESENCHYME. WHAT IS THE CORRECT ANSWER?

INNER EPITHELIAL CELLS OF AN ENAMEL ORGAN

CELLS OF AN EPITHELIAL SHEATH OF HERTWIG

**CELLS OF STELLATE RETICULUM** 

**CELLS OF DENTAL LAMINA** 

**OUTER EPITHELIAL CELLS OF AN ENAMEL ORGAN** 

DURING FORMATION OF A MANTLE DENTINE IN A MILKY TOOTH THE SECRETORY ACTIVITY OF ODONTOBLASTS WAS BROKEN. FORMATION OF WHAT FIBERS WILL BE BROKEN?

RADIAL COLLAGEN FIBERS OF KORFF

**ELASTIC** 

**RETICULAR** 

TRANSVERSE FIBERS OF EBNER

**NERVOUS** 

ON A TISSUE SPECIMEN OF A MANDIBLE THE DENTINE AT A STAGE OF FORMATION IS DETERMINED. COLLAGEN FIBERS SYNTHESIZED BY ODONTOBLASTS THIN AND LIE PERPENDICULARLY TO DENTINAL TUBULES. WHAT FIBERS ARE FORMED IN A DENTINE?

**TRANSVERSE** 

**RADIAL** 

**PARALLEL** 

FLASTIC

**PRECOLLAGEN** 

IN A DENTINE OF A DECALCIFIED TOOTH OF THE ADULT MAN THE SITES WITH THE DISORDER LOCATING DENTINAL TUBULES AND COLLAGEN FIBRILS ARE DETERMINED. NAME THIS KIND OF A DENTINE.

**SECONDARY** 

**PRIMARY** 

**TERTIARY** 

**DENTINE OF MILKY TOOTH** 

**DEAD WAYS** 

ON A TISSUE SPECIMEN - SECTION OF A JAW OF A HUMAN GERM OF 2 MONTHLY DEVELOPMENT, WHICH CONTAINS THE DAMAGED TOOTH EPITHELIAL ORGAN. WHAT HISTOLOGICAL PART OF A TOOTH WILL NOT BE DEVELOPED?

**ENAMEL** 

**DENTINE** 

**PULP** 

**CEMENTUM** 

PERIODONTAL LIGAMENT

AT EMBRYONIC DEVELOPMENT THE SUPERFICIAL CELLS OF A TOOTH PAPILLA WERE DAMAGED. THE DEVELOPMENT OF WHAT TOOTH STRUCTURE IS DISTURBED?

**DENTINE** 

**ENAMEL** 

**CEMENTUM** 

PERIODONTAL LIGAMENT

**CUTICLE OF ENAMEL** 

DURING EMBRYOGENESIS OF A TOOTH THERE WAS A DAMAGE OF INTERNAL CELLS OF A DENTAL SAC. WHAT FORMATION OF WHAT TOOTH STRUCTURE WILL BE BROKEN?

CEMENTUM

**PULP** 

**ENAMEL** 

**DENTINE** 

PERIODONTIAL LIGAMENT

AT INSPECTION OF THE PATIENT THE DEVELOPMENT OF A PULP OF A TOOTH WAS DISTURBED. WHAT EMBRYONIC SOURCE WAS DAMAGED?

**MESENCHYME** 

**ECTODERM** 

**ENDODERM** 

EPITHELIUM OF ORAL CAVITY

**DORSAL MESODERM** 

ON A TISSUE SPECIMEN OF A SECTION OF A MANDIBLE OF A 3,5-MONTH'S FETUS THE EPITHELIAL ENAMEL ORGAN SURROUNDED BY COMPACTLY POSED MESENCHIMAL CELLS, IS OBSERVED. NAME THIS MESENCHIMAE STRUCTURE? DENTAL SAC

PULP OF AN ENAMEL ORGAN

**DENTAL PAPILLA** 

**OUTER ENAMEL CELLS** 

**INNER ENAMEL CELLS** 

AT EMBRYOGENESIS OF AN ORAL CAVITY THE DEVELOPMENT OF TOOTH ENAMEL WAS BROKEN. WHAT SOURCE OF TEETH DEVELOPMENT WAS DAMAGED?

**EPITHELIUM OF AN ORAL CAVITY** 

**MESODERM** 

**MESENCHYME** 

**DENTAL SAC** 

**DENTAL PAPILLA** 

AFTER FORMATION OF A DENTINE THE PROCESS OF INVERSION IN CELLS - MOVING OF NUCLEI AND ORGANELLES OCCURS. WHAT CELLS DOES THIS PROCESS CONCERN?

**AMELOBLASTS** 

**ODONTOBLASTS** 

**PREODONTOBLASTS** 

**CEMENTOBLASTS** 

**CEMENTOCYTES** 

AT MICROSCOPICAL RESEARCH OF A MANDIBLE MATERIAL THE PERIODONTAL LIGAMENT IS NOT FULLY DEVELOPED. WHAT IS THE SOURCE OF PERIODONTAL LIGAMENT DEVELOPMENT?

**DENTAL SAC** 

**DENTAL PAPILLA** 

**DENTAL LAMINA** 

**AMELOBLASTS** 

**ECTODERM** 

ON A TISSUE SPECIMEN IN ONE STRUCTURE OF ORAL CAVITY THREE ZONES ARE VISIBLE: FATTY, GLANDULAR, FIBROUS. WHAT STRUCTURE IS ON A SLIDE?

HARD PALATE

**CHEEK** 

**GINGIVA** 

SOFT PALATE

LIP

ONE STRUCTURE OF AN ORAL CAVITY CONSISTS OF THREE PARTS - DERMAL, INTERMEDIATE, MUCOUS, AND THE BASIS IS FORMED BY STRIATED MUSCLE. WHAT STRUCTURE IS IT?

LIP

HARD PALATE

**GINGIVA** 

**SOFT PALATE** 

CHEEK

ONE STRUCTURE OF AN ORAL CAVITY IS VISIBLE. ITS INNER SURFACE IS LINED BY A STRATIFIED NONKERATINAZED EPITHELIUM, AND BACK SURFACE - PSEUDOSTRATIFIED CILIATED. NAME THIS STRUCTURE?

**SOFT PALATE** 

**GINGIVA** 

HARD PALATE

LIP

CHEEK

AT THE CHILD THE TONGUE IS OF WHITE COLOUR DUE TO INCREASE KERATINIZATION. AT THE EXPENSE OF WHAT PAPILLAE THERE IS A SIMILAR PHENOMENON?

**FILIFORM** 

**FUNGIFORM** 

**CIRCUMVALLATE** 

**CONICAL** 

**FOLIATE** 

AT A NEWBORN DURING SWALLOWING A PART OF MILK IS EXPELLED THROUGH THE NOSE AND BREATHING IS DISTURBED. AT TIME OF EXAMINATION A CLEFT PALATE WAS REVEALED. WHAT EMBRYONIC PATHOLOGY LEADS TO THIS?

UNFUSION OF PALATE PROCESSES

UNFUSION OF NASAL AND MAXILLAR PROCESSES

**UNFUSION OF MANDIBULAR PROCESSES** 

UNFUSION OF FRONTONASAL PROCESSES

UNFUSION OF FRONTAL PROCESSES

EXPERIMENTALLY AT A GERM IN A TOOTH GERM THE OUTER LAYER OF A DENTAL SAC IS DESTROIED DECAYED. WHAT STRUCTURE HAS NO THE FURTHER DEVELOPMENT?

PERIODONTAL LIGAMENT

**DENTINE** 

**ENAMEL** 

**CEMENTUM** 

**PULP** 

WHAT IS THE EMBRYONIC SOURCE OF DIGESTIVE SYSTEM EPITHELIUM DEVELOPMENT?

**ECTODERM AND ENDODERM** 

**ONLY ECTODERM** 

**ONLY ENDODERM** 

MESODERM AND ENDODERM

MESODERM AND ECTODERM

THE CHILD COMPLAINS OF BAD TOOTH ACHE. THE STOMATOLOGIST REVEALED CARIOUS DAMAGE OF ENAMEL.

AMOUNT OF WHAT MINERAL SUBSTANCES DECREASES IN A SITE OF CARIOUS DAMAGE?

PHOSPHORUS, FLOURIDE, CALCIUM

SODIUM, CALCIUM, POTASSIUM

POTASSIUM, PHOSPHORUS, FLUORIDE

MG, FLUORIDE, CALCIUM

PHOSPHORUS, MG, POTASSIUM

ON A TRANSVERSE SECTION OF A HOLLOW ORGAN REVEALED MUCOSA IS LINED BY STRATIFIED SQUAMOUS NONKERATINIZED EPITHELIUM. WHAT ORGAN IS IT?

**ESOPHAGUS** 

**DUODENAL INTESTINE** 

COLON

**UTERUS** 

**APPENDIX** 

THE FAILURE OF EXOCRINE FUNCTION OF A PANCREAS IS FOUND OUT IN THE WOMAN OF 30 YEARS. SPLITTING OF WHAT SUBSTANCES WILL BE BROKEN?

CARBOHYDRATES, PROTEINS, LIPIDS

PROTEINS, LIPIDS

CARBOHYDRATES, LIPIDS

**PROTEINS** 

PROTEINS, CARBOHYDRATES

AFTER GASTROECTOMY AT THE PATIENT THE MALIGNANT ANEMIA DEVELOPS. ABSENCE OF WHAT CELLS OF A STOMACH GLAND DOES PROVOKE THIS PATHOLOGY?

**PARIETAL** 

**MUCOCYTES** 

**CHIEF** 

**ENDOCRINOCYTES** 

**GOBLET** 

THE MAN USES DRY NUTRITION. WHAT SALIVARY GLANDS MUST INCREASE THEIR SECRETION? PAROTID

PALATINE BUCCAL SUBMANDIBULAR SUBLINGUAL

THE SUBMUCOSA OF A SMALL INTESTINE IS FILLED WITH SEROUS SECRETORY UNITS OF GLAND. WHAT PART OF AN INTESTINE IS ON A SLIDE?

**DUODENUM** 

**JEJUNUM** 

**COLON** 

**CAECUM** 

**ILEUM** 

IN A WALL OF A SMALL INTESTINE AT THE BOTTOM OF CRYPTS LOCATED CELLS, IN APICAL PART OF WHICH ARE POSED ACIDOPHILIC SECRETORY GRANULES, CYTOPLASM IS PAINTED BASOPHILIC. WHAT ARE THESE CELLS?

PANFTH

**GOBLET** 

**STEM** 

**ENDOCRINE** 

WITH BRUSH BORDER

PARENCHYME OF ORGAN IS DIVIDED INTO LOBULES, WHICH HAVE THE HEXAGONAL SHAPE AND CONSIST OF PLATES. BETWEEN PLATES ARE LOCATED SINUSOIDAL CAPILLARIES, WHICH RADIALLY CONVERGE TO THE CENTRAL VEIN. WHAT ORGAN IS IT?

**LIVER** 

**SPLEEN** 

**PANCREAS** 

**THYMUS** 

LYMPH NODE

ON A SLIDE OF A SMALL INTESTINE IN MUCOSA HAVE REVEALED CLUMPS OF ROUND CELLS WITH LARGE BASOPHILIC NUCLEI AND NARROW CYTOPLASM. THE CENTRAL PART OF CLUMP IS LIGHT AND CONTAINS LESS CELLS, THAN PERIPHERAL. HOW SUCH THIS MORPHOLOGICAL STRUCTURE REFERS TO AS?

LYMPHATIC NODULE

**CLUMP OF FATTY CELLS** 

**CLUMP OF LYMPHATIC VESSELS** 

**NERVOUS NODULE** 

**CLUMP OF BLOOD VESSELS** 

AT THE CHILD OF THE FIRST YEAR OF LIFE THE DISTURBANCE OF SPLITTING OF MATERNAL MILK IS OBSERVED. THE FUNCTION OF WHAT CELLS OF STOMACH GLANDS IS DISTURBED?

**CHIEF CELLS** 

**ENDOCRINE** 

PARIETAL

**MUCOCYTES** 

**GOBLET** 

ON AN ELECTRON MICROPHOTOGRAPH OF AN EPITHELIUM OF A DUODENUM THE CELL WITH GRANULES ON A BASAL POLE IS REVEALED. WHAT CELL IS IT?

**ENDOCRINE** 

STEM

**COLUMNAR WITH VILLI** 

**GOBLET** 

**PARIETAL** 

IN THE PATIENT WITH CHRONIC GASTRITIS IS ESTABLISHED DECREASE OF AN ACIDITY OF A GASTRIC JUICE. FUNCTION OF WHAT CELLS IS REDUCED?

PARIETAL

**ENDOCRINOCYTES** 

**CHIEF** 

**MUCOUS** 

**BASAL** 

DURING THE MORPHOLOGICAL ANALYSIS OF AN ESOPHAGUS MUCOSA THE KERATINIZATION OF AN EPITHELIUM IS REVEALED. WHAT FROM THE GIVEN BELOW TYPES OF THE EPITHELIUM COVERS MUCOSA OF ESOPHAGUS? STRATIFIED SQUAMOUS NONKERATINIZED

SIMPLE SQUAMOUS

**PSEUDOSTRATIFIED CILIATED** 

SIMPLE COLUMNAR

STRATIFIED SQUAMOUS KERATINIZED

THE REGENERATION OF MUCOSAL EPITHELIUM OF A SMALL BOWEL IS DISTURBED AFTER RADIAL THERAPY. WHAT CELLS OF AN EPITHELIUM ARE DAMAGED?

**INTERMEDIATE** 

**ENTEROCYTES** 

**GOBLET** 

**ENDOCRINE CELLS** 

**PANETH** 

AFTER RADIAL THERAPY OF A CARCINOMA OF THE STOMACH THE ANEMIA ARISED DUE TO DAMAGE OF CELLS PRODUCING THE ANTIANEMIC FACTOR. WHAT CELLS OF STOMACH GLAND ARE DAMAGED?

**PARIETAL** 

CHIEF

**ENDOCRINE** 

**NECK** 

**MUCOCYTES** 

THE DOCTOR HAS REVEALED AT THE PATIENT A SET OF SYMPTOMS OF AN ACUTE COLOENTERITIS WITH DISTURBED PROCESSES OF SPLITTING AND ADSORPTION OF NUTRITIOUS SUBSTANCES. WHAT CELLS OF AN INTESTINAL EPITHELIUM ARE DAMAGED?

**ENTEROCYTES** 

**GOBLET** 

**INTERMEDIATE** 

**PANETH** 

**ENDOCRINE** 

AT INSPECTION OF THE PATIENT 43 YEARS IS REVEALED, THAT THE PROTEINS ARE BADLY DIGESTED IN A STOMACH. THE ANALYSIS OF A GASTRIC JUICE HAS SHOWN A LOW ACIDITY. FUNCTION OF WHAT CELLS OF THE STOMACH IS BROKEN IN THIS CASE?

**PARIETAL** 

**CHIEF** 

**MUCOUS** 

**ENDOCRINE** 

**NECK CELLS** 

AT THE PATIENT THE RATE OF REGENERATION OF A SMALL BOWEL EPITHELIUM IS DECREASED. PATHOLOGY OF WHAT CELLS CAN LEAD TO THIS CONDITION?

UNDIFFERENTIATED

**GOBLET** 

PANETH

**ENTEROCYTES** 

**ENDOCRINOCYTES** 

AFTER RADIAL THERAPY OF A LIVER TUMOR THE ULCER OF A SMALL INTESTINE WAS FORMED AS A RESULT OF DECREASED MITOTIC ACTIVITY OF CELLS WHICH PROVIDE RENUWAL OF EPITHELIUM. NAME THEM. CRYPT UNDIFFERENTIATED

**ENDOCRINE** 

**GOBLET** 

**EXOCRINOCYTES WITH ACIDOPHILIC GRANULARITY** 

COLUMNAR WITH BRUSH BORDER

THE PATIENT 45 YEARS IS HOSPITALIZED WITH THE COMPLAINT TO A STOMACH ACHE. THE GASTROSCOPY HAS FOUND OUT AN ULCER AT THE STOMACH. DISTURBED FUNCTION OF WHAT CELLS OF A STOMACH MUCOSA BECAME ONE OF THE REASONS OF A DAMAGED MUCOSA?

CELLS OF AN EPITHELIUM, PRODUCING MUCUS

PARIETAL CELLS PRODUCING HCL

CHIEF CELLS, PRODUCING PEPSINOGEN

**ENDOCRINE, PRODUCING SOMATOSTATIN** 

**ENDOCRINE, PRODUCING SEROTONIN** 

ON A TISSUE SPECIMEN OF A GLANDULAR ORGAN ARE DEFINED ONLY SEROUS SECRETORY UNITS. IN AN INTERLOBULAR CONNECTIVE TISSUE ARE VISIBLE DUCTS, LINED BY A TWO-LAYERED OR STRATIFIED EPITHELIUM.

WHAT GLAND IS IT?

**PAROTID** 

**SUBMANDIBULAR** 

**PANCREAS** 

**SUBLINGUAL** 

LIVER

SOME DISEASES OF A SMALL INTESTINE ARE CONNECTED TO DISTURBED FUNCTION OF EXOCRINOCYTES WITH ACIDOPHILIC GRANULES (PANETH CELLS). WHERE ARE THESE CELLS FOUND?

AT THE BOTTOM OF INTESTINAL CRYPT

IN A PLACE OF TRANSITION OF VILLI TO CRYPTS

ON APICAL PART OF INTESTINAL VILLI

ON A LATERAL SURFACE OF INTESTINAL VILLI

IN THE TOP PART OF INTESTINAL CRYPT

AT SOME DISEASES OF A COLON THE RATIO BETWEEN EPITHELIOCYTES OF A MUCOSA CHANGES. WHAT TYPES OF CELLS PREVAIL IN EPITHELIUM OF CRYPTS OF A COLON IN NORM?

**GOBLET** 

**UNDIFFERENTIATED** 

**COLUMNAR WITH BRUSH FORDER** 

**ENDOCRINE** 

WITH ACIDOPHILIC GRANULES

DURING A PROCTOSCOPY THE TUMOR IS REVEALED WHICH OCCURS FROM A MUCOSA OF A LAST PART OF A RECTUM. OF WHAT EPITHELIUM WAS THIS TUMOR FORMED?

STRATIFIED SQUAMOUS NONKERATINIZED

**TRANSITIONAL** 

SIMPLE COLUMNAR SECRETORY

SIMPLE COLUMNAR WITH BRUSH BORDER

SIMPLE CUBOIDAL

AFTER A CORROSIVE BURN OF AN ESOPHAGUS THERE WAS ITS LOCAL NARROWING, OWING TO FORMATION OF A SCAR. WHAT CELLS OF LOOSE CONNECTIVE TISSUE TAKE PART IN FORMATION OF THE SCAR?

MATURE SPECIALIZED FIBROBLASTS

**FIBROCLASTS** 

**FIBROCYTES** 

**MYOFIBROBLASTS** 

JUVENILE UNDIFFERENTIATED FIBROBLASTS

AT CHRONIC PANCREATITIS THE DECREASE OF SYNTHESIS AND SECRETION OF TRYPSIN IS OBSERVED. SPLITTING OF WHAT SUBSTANCES WILL BE BROKEN?

**PROTEINS** 

CARBOHYDRATES
PROTEINS AND CARBOHYDRATES
LIPIDS
NUCLEIC ACIDS

AT INCREASE OF A CONNECTIVE TISSUE OF A LIVER (FIBROSIS) OWING TO CHRONIC DISEASES IS OBSERVED INFRINGEMENT OF CIRCULATION OF A BLOOD IN CLASSICAL LOBULES. WHAT IS THE DIRECTION OF MOVEMENT OF A BLOOD IN LOBULES IN NORM?

FROM PERIPHERY TO CENTER

FROM CENTER TO PERIPHERY

**AROUND LOBULE** 

FROM TOP TO THE BASIS

FROM THE BASIS TO TOP

THE PATIENT, 55 YEARS, IS UNDER OBSERVATION OF THE ENDOCRINOLOGIST CONCERNING INFRINGEMENT OF ENDOCRINE FUNCTION OF A PANCREAS, THAT IS SHOWN BY DECREASE OF AMOUNT OF A GLUCAGON IN A BLOOD. FUNCTION OF WHAT CELLS OF ISLETS OF LANGERHANS IS BROKEN?

Α

D1

В

D

PP

PATIENT HAS DIABETES MELLITUS FROM 14-TH YEARS OLD. WHAT CELLS OF ISLETS OF LANGERHANS OF A PANCREAS DO NOT FUNCTION?

В

D

Α

D1 PP

AT THE PATIENT DURING A GASTROSCOPY THE UNSUFFICIENT AMOUNT OF MUCUS COVERING A MUCOSA IS REVEALED. IT IS CONNECTED TO INFRINGEMENT OF FUNCTION OF WHAT CELLS IN A WALL OF A STOMACH? COLUMNAR MUCOUS EPITHELIUM

PARIETAL CELLS OF A STOMACH

**CHIEF** 

**ENDOCRINOCYTES** 

**ADDITIONAL MUCOCYTES** 

THE BABY RECEIVES MATERNAL MILK. WHAT HISTOLOGICAL STRUCTURES OF ORAL CAVITY FACILITATE THE PROCESS

OF SUCKING OF MILK?

**EPITHELIAL VILLI OF A LIP** 

**FUNGIFORM PAPILLAE OF TONGUE** 

PSEUDOSTRATIFIED EPITHELIUM OF A LIP

CONNECTIVE TISSUE PAPILLAE OF A LIP

**FOLIATE PAPILLAE OF TONGUE** 

AT THE PHYSICIAN RECEPTION A PATIENT COMPLAINS ON LOSS OF GENERAL SENSATION OF A TONGUE. WHAT STRUCTURES MAY BE DAMAGED?

FILIFORM PAPILLAE

**TASTE BUDS** 

**FOLIATE PAPILLAE** 

**MOTOR NERVE ENDINGS** 

CIRCUMVALLATE PAPILLAE

DURING EXAMINATION OF A STOMACH JUICE OF A PATIENT WAS REVELED INCREASED CONCENTRATION OF HYDROCHLORIC ACID. FUNCTION OF WHAT STOMACH CELLS MAY BE DISTURBED? PARIETAL

CHIEF MUCOUS ENDOCRINE LINING

ON TIME OF CHRONIC INFLAMMATION OF SALIVARY GLANDS AN EPITHELIUM OF EXCRETORY DUCTS IS DAMAGED.

WHAT TYPE OF EPITHELIUM OF STRIATED EXCRETORY DUCTS OF SALIVARY GLANDS IS INJURED?

**COLUMNAR WITH BASAL STRIATIONS** 

CUBOIDAL WITH BASAL STRIATIONS

SQUAMOUS WITH BASAL STRIATIONS

**BILAYERED WITH BASAL STRIATIONS** 

STRATIFIED CUBOIDAL

ONE OF THE ORAL CAVITY STRUCTURE COVERED BY MUCOUS MEMBRANE, HAS ONE FREE SURFACE AND OTHER GROW WITH PERIOSTEUM. AN EPITHELIUM IS STRATIFIED SQUAMOUS NONKERATINIZED. LAMINA PROPRIA FORMS LONG PAPILLAE PROTRUDING INTO THE EPITHELIUM. NAME THIS STRUCTURE.

HARD PALATE

LIP

CHEEK

**TONGUE** 

**GINGIVA** 

A PATIENT WITH RHEUMATISM WAS PRESCRIPTED LONG RECEPTION OF ASPIRIN. WHAT STRUCTURE OF STOMACH MUCOUS MEMBRANE PROTECTS THE STOMACH WALL AGAINST INJURY?

SIMPLE COLUMNAR SECRETORY EPITHELIUM

STRATIFIED CILIATED EPITHELIUM

STRATIFIED SQUAMOUS NONKERATINIZED EPITHELIUM

**MUSCLE TISSUE** 

**CONNECTIVE TISSUE** 

AS A RESULT OF ANOMALY OF EMBRYONIC DEVELOPMENT A NEWBORN HAS DISTURBANCE OF BIG SALIVARY GLANDS DEVELOPMENT. WHAT DAMAGED EMBRYONIC STRUCTURE CALLS THIS PATHOLOGY?

**ECTODERM** 

**MESENCHYME** 

**ENDODERM** 

**SPLANCHNOTOME** 

SOMITE

A PATIENT WITH CHRONIC GASTRITIS HAS DAMAGED STRUCTURE OF MUCOUS MEMBRANE AND DECREASED PRODUCTION OF ACID. WHAT IS DISTURBED IN RESULT?

**DIGESTION OF PROTEINS** 

SECRETION OF PANCREATIC JUICE

SECRETION OF GASTRIC JUICE

**EVACUATION OF A CHYME TO DUODENUM** 

SECRETORY FUNCTION OF SMALL INTESTINE

A PATIENT AFTER X-RAY TREATMENT OF A STOMACH CANCER HAS MALIGNANT ANEMIA IN A RESULT OF DAMAGE OF CELLS, PRODUCING ANTIANEMIC FACTOR /INTRINSIC FACTOR/. WHAT STOMACH GLAND CELLS ARE DAMAGED? PARIETAL

CHIFF

**MUCOCYTES** 

**ENDOCRINOCYTES** 

**MUCOUS** 

ONE PERSON RIGHT EDGE OF A TONGUE WAS BURNT. WHAT TONGUE PAPILLAE ARE DAMAGED MORE THAN

OTHERS?

**FOLIATE** 

CONICAL

CIRCUMVALLATE FILIFORM FUNGIFORM

IN A PATIENT WITH GASTRIC PATHOLOGY WAS REVEALED AN ANEMIA. DISTURBANCE OF WHAT STOMACH

FUNCTIONS MAY LEAD TO THIS CONDITION?

**ABSORPTION OF VITAMIN B12** 

SECRETION OF PEPSINOGEN

SECRETION OF HYDROCHLORIC ACID

ABSORPTION OF UREA

**EXCRETION OF UREA** 

IN A PATIENT BLOOD TEST WAS REVELED DECREASED CONCENTRATION OF PROTHROMBIN. WHAT LIVER'S FUNCTION

IS DISTURBED?

SYNTHESIS OF PROTEIN

**SECRETION OF BILE** 

**PROTECTIVE** 

STORAGE OF VITAMIN A

SYNTHESIS OF GLYCOGEN

A PART OF STOMACH EPITHELIUM WAS TAKEN FOR THE SUBSEQUENT BIOPSY INVESTIGATION. WHAT TYPE OF

**EPITHELIUM LINES STOMACH MUCOSA?** 

SIMPLE COLUMNAR SECRETORY

SIMPLE COLUMNAR CILIATED

SIMPLE COLUMNAR WITH MICROVILLI

SIMPLE CUBOIDAL

STRATIFIED SGUAMOUS NONKERATINIZED

GASTROSCOPY IS AN INVESTIGATION OF THE INNER SURFACE OF THE STOMACH BY THE GASTROSCOPE. WHAT

FORMATIONS FROM LIST BELOW BELONG TO RELIEF OF THE NORMAL STOMACH MUCOSA?

FOLDS, MAMMILATED AREAS, PITS

FOLDS, CRYPTS, VILLI

HAUSTRAE, FOLDS

FOLDS, LYMPHATIC FOLLICLES

**RELIEF IS SMOOTH** 

ONE OF THE INTESTINE PORTION IS CALLED AN "INTESTINAL TONSIL". WHICH PORTION IS IT?

**APPENDIX** 

**JEJUNUM** 

SIGMOID COLOR

RECTUM

**DUODENUM** 

UNDER CERTAIN PATHOLOGIC INJURY WAS FORMED A LOCAL DAMAGE OF THE STOMACH EPITHELIUM. WHICH CELLS

PROVIDE ITS REGENERATION?

MUCOUS CELLS OF THE GLAND NECK

CHIEF

PARIETAL

MUCOUS CELLS OF THE GLAND BODY

**ENDOCRINOCYTES** 

A PATIENT WITH STOMACH WALL INFLAMMATION HAS DAMAGED GLANDULAR CELLS. WHAT CELLS FROM LIST

BELOW ARE FOUND IN FUNDIC GLANDS OF THE STOMACH?

CHIEF, PARIETAL, MUCOUS, ENDOCRINOCYTES

STRIATED EXOCRINOCYTES, ENDOCRINOCYTES

MUCOUS SEROUS, BASKET

CHIEF, PARIETAL, STRIATED, EXOCRINOCYTES

GOBLET, STRIATED, EXOCRINOCYTES

A 50-YEARS-OLD WOMAN COMPLAINS OF LOSS OF APPETITE, DECREASED BODY WEIGHT, FATIGUE DURING BLOOD TEST EXAMINATION AN INCREASED GLUCOSE BLOOD LEVEL WAS REVEALED. PATHOLOGY OF WHICH CELLS DOES TAKE PLACE?

**B-CELLS** 

**PANCREOCYTES** 

**LIPOTROCYTES** 

**THYROCYTES** 

A-CELLS

A GASTRIC MUCOSA BIOPSY ANALYSIS OF THE PATIENT WITH CHRONIC GASTRITIS REVEALS SHARP DECREASE OF AMOUNT OF PARIETAL CELLS. WHAT WILL BE CHANGED IN GASTRIC JUICE?

**DECREASED JUICE ACIDITY** 

INCREASED PRODUCTION OF VITAMIN

**INCREASED JUICE ACIDITY** 

**DECREASED PRODUCTION OF MUCOUS** 

**DECREASED PRODUCTION OF ENZYMES** 

ENTEROSCOPY REVEALS ACTIVE MOVEMENT OF INTESTINAL VILLI ON TIME OF DIGESTION. VILLI BECOME SHORTER.

WHAT PROVIDES THIS ACTION?

CONTRACTION OF SMOOTH MUSCLE

**PERISTALTIC** 

FORMATION OF FOLDS

**INNERVATION** 

**CRYPTS BECOME LONGER** 

HISTOLOGIC EXAMINATION OF A STOMACH REVEALS THAT ITS GLANDS CONTAIN VERY SMALL AMOUNT OF PARIETAL CELLS OR EVEN THEIR ABSENCE. MUCOSA OF WHICH STOMACH REGION WAS EXAMINED?

**PYLORIC** 

**FUNDUS** 

**BODY** 

**CARDIAC** 

**BOTTOM** 

A TIP OF A TONGUE IS BURNT. SENSATION OF WHICH TASTE IRRITATIONS IS DISTURBED MORE?

**SWEET** 

ACID

SALT

ACID AND SALT

**BITTER** 

IN MICROSCOPIC SLIDE OF A STOMACH FUNDIC GLANDS ARE REVEALED BIG CELLS WITH ACIDOPHILIC CYTOPLASM. UNDER EM IN THESE CELLS IS VISIBLE COMPOUND SYSTEM OF INTERCELLULAR CANALICULI. WHAT IS PRODUCED BY THESE CELLS?

HCL

**MUCUS** 

**GASTRIN** 

**SEROTONIN** 

**PEPSINOGEN** 

EXAMINATION OF BIOPSY MATERIAL OF JEJUNUM MUCOSA REVEALS DAMAGE TO EPITHELIUM OF VILLI. WHAT TYPE OF CELLS PREDOMINATES IN THE INTESTINAL VILLI?

**COLUMNAR WITH MICROVILLI** 

**GOBLET** 

**PANETH** 

**ENDOCRINOCYTES** 

**COLUMNAR WITHOUT MICROVILLI** 

IN MICROSCOPIC SLIDE OF ONE DIGESTIVE GLAND ARE VISIBLE ONLY SEROUS SECRETORY UNITS. IN THE INTERLOBULAR CONNECTIVE TISSUE ARE PRESENT EXCRETORY DUCTS ARE LINED BY BILAYERED OR STRATIFIED EPITHELIUM. WHAT ORGAN IS IT?

**PAROTID** 

**SUBMADIBULAR** 

**SUBLINGUAL** 

**LIVER** 

**PANCREAS** 

DURING EXAMINATION OF A PATIENT WITH PATHOLOGY OF SMALL INTESTINE IS REVEALED DISTURBANCE OF MEMBRANOUS DIGESTION. PATHOLOGY OF WHICH CELLS MAY CALL THIS DISTURBANCE?

**COLUMNAR WITH MICROVILLI** 

**ENDOCRINOCYTES** 

COLUMNAR WITHOUT MICROVILLI

**GOBLET** 

**PANETH** 

AT A CONFERENCE OF THE DOCTORS SURVEYED THE REASON OF MORS OF THE PATIENT WITH THE DIAGNOSIS A CIRRHOSIS OF A LIVER. WHAT CHANGE OF A MICROSCOPIC STRUCTURE OF A LIVER SHOULD BE PUT ON THE FIRST PLACE?

THICKENING OF AN INTERLOBULAR CONNECTIVE TISSUE

**EXPANSION OF SYNUSOIDAL CAPILLARIES** 

**INCREASE OF THE SIZES OF LOBULES** 

**DECREASE OF THE SIZES OF LOBULES** 

**DECREASE OF THE SIZES OF TRIADS** 

WITH AGE THE EPITHELIUM OF AN ESOPHAGUS CAN BE EXPOSED TO A METAPLASIA, TURNING IN KERATINIZATION.

WHAT TYPE OF EPITHELIUM LIES ESOPHAGEAL MUCOSA IN NORM?

STRATIFIED SQUAMOUS NONKERATINIZED

STRATIFIED TRANSITIONAL

**PSEUDOSTATIFIED** 

SIMPLE WITH MICROVILLI

SIMPLE COLUMNAR

THE PATHOLOGY OF FUNCTIONS OF A STOMACH CAN BE CONNECTED TO STRUCTURAL CHANGES IN ITS GLANDS. AT THE EXPENSE OF WHAT CELLS OF A STOMACH GLANDS IS THEIR NEOGENESIS CARRIED OUT?

**NECK MUCOCYTES** 

PARIETAL

**CHIEF** 

**ADDITIONAL** 

**ENDOCRINE** 

ON THE BASIS OF MORPHOLOGICAL AND FUNCTIONAL FEATURES ARE DESCRIBEED DIFFERENT TYPES OF ORAL MUCOSA. WHAT PART OF ORAL CAVITY IS LINED BY THE SPECIALIZED TYPE OF MUCOSA?

**DORSAL SURFACE OF TONGUE** 

HARD PALATE

**GINGIVA** 

**VENTRAL SURFACE OF TONGUE** 

CHEEK

THE DENTINE, FORMING THE MOST PART OF A CROWN, NECK AND ROOT OF A TOOTH, IS PENETRATED BY RADIAL TUBULES, IN WHICH THERE ARE PROCESSES OF TOMS. WHAT ARE PROCESSES OF TOMS?

PROCESSES OF DENTINOBLASTS

PROCESSES OF AMELOBLASTS

INTERTUBULAR DENTINE

FIBERS OF CORF

**FIBERS OF EBNER** 

THE ORAL MUCOSA IS WETTED BY A SECRET OF SERO-MUCOUS GLANDS. WHAT ORAL GLANDS SECRET CONSTANTLY?

LINGUAL, BUCCAL

**SUBMANDIBULAR** 

**SUBLINGUAL** 

**PAROTID** 

**PHARYNGEAL** 

A HISTOLOGICAL SPECIMEN PRESENTS A DEVELOPED TOOTH THAT HAS A COATING RESISTANT TO ACIDS, BUT IT CAN BE FOUND ONLY ON THE LATERAL SURFACES OF THE TOOTH. WHAT COATING IS MEANT?

**CUTICLE** 

**CEMENT** 

**ENAMEL PELLICLE** 

**ENAMEL** 

**DENTINE** 

A CHILD HAS ABNORMAL FORMATION OF TOOTH ENAMEL AND DENTIN AS A RESULT OF LOW CONCENTRATION OF CALCIUM IONS IN BLOOD. SUCH ABNORMALITIES MIGHT BE CAUSED BY DEFICIENCY OF THE FOLLOWING HORMONE:

PARATHORMONE

**THYROCALCITONIN** 

**THYROXIN** 

SOMATOTROPIC HORMONE

TRIIODOTHYRONINE

DURING EXAMINATION OF A CHILD'S ORAL CAVITY A PEDIATRICIAN ESTABLISHED PRESENCE OF INFERIOR MEDIAL INCISORS. THE CHILD'S DEVELOPMENT IS NORMAL. HOW OLD IS THE CHILD?

6-7 MONTHS

8-9 MONTHS

**10-12 MONTHS** 

**13-14 MONTHS** 

1-2 MONTHS

BEFORE TEETH COME OUT FIRST ON THEIR ROOTS APPEARS A SOLID TISSUE THAT LOOKS LIKE MEMBRANE RETICULATED BONE. WHAT TISSUE IS IT?

**CEMENT** 

**DENTIN** 

**ENAMEL** 

LOOSE FIBROUS CONNECTIVE TISSUE

**DENSE FIBROUS CONNECTIVE TISSUE** 

HISTOLOGICAL STUDY OF AN EXTIRPATED PULP REVEALED SOME CYLINDRICAL CELLS IN ITS PERIPHERAL LAYER. WHAT ARE THESE CELLS CALLED?

**ODONTOBLASTS** 

**FIBROBLASTS** 

**MONOCYTES** 

**AMELOBLASTS** 

**MYOFIBROBLASTS** 

A HISTOLOGICAL SPECIMEN OF AN ORAL CAVITY ORGAN DEMONSTRATES THAT THE ORGAN'S ANTERIOR SURFACE IS LINED WITH MULTILAYER SQUAMOUS NONKERATINOUS EPITHELIUM, AND ITS POSTERIOR SURFACE - WITH MULTISERIAL CILIATED EPITHELIUM. WHAT ORGAN IS IT?

**SOFT PALATE** 

LIP

**GINGIVA** 

HARD PALATE

**CHEEK** 

EXAMINATION OF A PATIENT REVEALED ABNORMAL DEVELOPMENT OF ENAMEL. THIS IS CAUSED BY DAMAGE OF THE FOLLOWING STRUCTURAL ELEMENTS OF DENTAL GERM:

INTERNAL ENAMEL EPITHELIUM OF ENAMEL ORGAN PULP OF ENAMEL ORGAN CERVIX OF ENAMEL ORGAN EXTERNAL ENAMEL EPITHELIUM OF ENAMEL ORGAN INTERMEDIATE LAYER OF ENAMEL ORGAN

A HISTOLOGICAL SPECIMEN OF A MANDIBULAR GLAND SHOWS AN EXCTRETORY DUCT. MUCOUS MEMBRANE OF THE DUCT IS LINED WITH CUBIC EPITHELIUM WHOSE CELLS HAVE WEAKLY DEVELOPED ORGANELLAS. WHAT EXCRETORY

**DUCT IS IT?** 

**INTERCALATED** 

**STRIATED** 

**COMMON EXCRETORY** 

**INTERLOBULAR** 

SIMPLE

IN THE PROCESS OF TOOTH TISSUE HISTOGENESIS DENTIN WASN'T FORMED IN TIME FOR SOME REASONS. WHAT PROCESS OF FURTHER HISTOGENESIS WILL BE DELAYED OR WILL NOT TAKE PLACE AT ALL?

**ENAMEL FORMATION** 

**CELLULAR CEMENT FORMATION** 

PREDENTINAL SPACE FORMATION

**PULP FORMATION** 

ACELLULAR CEMENT FORMATION

A 60-YEAR-OLD FEMALE PATIENT PRESENTS WITH HYPOACTIVITY OF THE PRINCIPAL DIGESTIVE ENZYME OF SALIVA. THIS IS USUALLY ACCOMPANIED BY DISTURBED PRIMARY HYDROLYSIS OF:

**CARBOHYDRATES** 

**LACTOSE** 

**PROTEINS** 

**FATS** 

**CELLULOSE** 

A PATIENT UNDERWENT GASTROSCOPY THAT REVEALED INSUFFICIENT AMOUNT OF MUCUS COVERING THE MUCOUS MEMBRANE. THIS PHENOMENON IS CAUSED BY THE DYSFUNCTION OF THE FOLLOWING CELLS OF STOMACH WALL: CELLS OF PRYSMATIC GLANDULAR EPITHELIUM

CERVICAL CELLS OF GASTRIC GLANDS

**ENDOCRINOCYTES** 

PARIETAL CELLS OF GASTRIC GLANDS

PRINCIPAL EXOCRINOCYTES OF GASTRIC GLANDS

DURING EXAMINATION OF A CHILD'S ORAL CAVITY A PEDIATRICIAN FOUND 8 INCISORS. THE CHILD'S DEVELOPMENT CORRESPONDS TO HIS AGE. HOW OLD IS THE CHILD?

**10-12 MONTHS** 

6-7 MONTHS

**12-15 MONTHS** 

7-8 MONTHS

**16-20 MONTHS** 

DURING THE EMBRYOGENESIS OF ORAL CAVITY THE DEVELOPMENT OF DENTAL ENAMEL WAS DISTURBED. WHAT SOURCE OF DENTAL DEVELOPMENT WAS DAMAGED?

**EPITHELIUM** 

**MESENCHYMA** 

**MESODERMA** 

**DENTAL SACCULE** 

**DENTAL PAPILLA** 

DURING THE TOOTH DEVELOPMENT THE ENAMEL ORGAN HAS PRISMATIC CELLS WITH HEXAGONAL INTERSECTION; THE NUCLEUS IS SITUATED IN THE CENTRAL PART OF THE CELL. WHAT CELLS ARE MEANT? PREENAMELOBLASTS

EXTERIOR ENAMELOBLASTS
CAMBIAL CELLS
ENAMEL PULP CELLS
PREODONTOBLASTS

A CHILD DAMAGED THE LATERAL SURFACE OF HIS TONGUE. WHAT LINGUAL PAPILLAS ARE MOST LIKELY TO BE

DAMGED?

**FOLIATE** 

CONIC

VALLATE

**FILIFORM** 

**FUNGIFORM** 

WHILE EXAMINING THE ORAL CAVITY A STOMATOLOGIST REVEALED INFLAMMATION OF PAPI-LLAE ON THE BORDER OF THE MEDIAN AND POSTERI-OR THIRD OF THE BACK OF TONGUE. WHAT PAPILLAE ARE INFLAMED?

PAPILLAE VALLATAE

PAPILLAE FILIFORMES

PAPILLAE CONICAE

PAPILLAE FUNGIFORMES

PAPILLAE FOLIATAE

AN ELECTRON MICROPHOTOGRAPHY OF A FRAGMENT OF PROPER GASTRIC GLAND SHOWS A BIG IRREGULAR ROUND-SHAPED CELL. THERE ARE A LOT OF INTRACELLULAR TUBULES AND MITOCHONDRIA IN THE CYTOPLASM.

SPECIFY THIS CELL:

PARIETAL CELL

**ENDOCRINE CELL** 

**MUCOUS CELL** 

**UNDIFFERENTIATED CELL** 

PRINCIPAL CELL

A PATIENT OF 30 YEARS WITH ACUTE INFLAMMATION OF THE PANCREAS (PANCREATITIS) HAS DECREASED OF LUMINAL DIGESTION OF PROTEINS. WITH INADEQUATE SYNTHESIS AND SECRETION OF WHICH PANCREATIC ENZYME MAY IT BE CONNECTED?

**TRYPSIN** 

**PEPSIN** 

**LIPASE** 

**AMYLASE** 

**DIPEPTIDAZE** 

WHEN AUTORADIOGRAPHIC STUDY OF THE SMALL INTESTINE EPITHELIUM WAS OCCURRED, IT WAS FOUND THAT COMPLETE REGENERATION OCCURS FOR 3 DAYS OF ACTIVE PROLIFERATION OF UNDIFFERENTIATED CELLS. SPECIFY THEIR LOCATION:

THE BOTTOM OF THE CRYPTS

THE TOP OF THE VILLI

THE BASE OF THE VILLI

LAMINA PROPRIA OF THE MUCOSA

THE LATERAL SURFACE OF THE VILLI

THE DOCTOR HAS REVEALED AT THE PATIENT A SET OF SYMPTOMS OF AN ACUTE COLOENTERITIS WITH DISTURBED PROCESSES OF SPLITTING AND ADSORPTION OF NUTRITIOUS SUBSTANCES. WHAT CELLS OF AN INTESTINAL EPITHELIUM ARE DAMAGED?

**ENTEROCYTES** 

**INTERMEDIATE** 

**GOBLET** 

**PANETH** 

**ENDOCRINE** 

DAMAGE OF THE EPITHELIUM OF THE MUCOSA WAS REVEALED BY ENDOSCOPIC EXAMINATION OF THE STOMACH.

WHAT GLANDULOTCYTES ARE RESPONSIBLE FOR REPARATIVE REGENERATION?

UNDIFFERENTIATED CERVICAL MUCOCYTES

ADDITIONAL MUCOCYTES

CHIEF EXOKRINOCYTES

PARIETAL EXOKRINOCYTES

SURFACES GLANDULAR EPITHELIUM

LOCAL STENOSIS OF THE ESOPHAGUS DUE TO SCAR FORMATION OCCURRED AFTER CHEMICAL BURN. WHAT CELLS OF THE LOOSE CONNECTIVE TISSUE ARE INVOLVED IN THE FORMATION OF SCARS?

MATURE SPECIALIZED FIBROBLASTS

YOUNG LOW-SPECIALIZED FIBROBLASTS

**FIBROCYTES** 

**MYOFIBROBLASTS** 

**FIBROCLASTS** 

IN HISTOLOGICAL SLIDE CROSS-SECTION OF THE HOLLOW ORGAN WALL IS PRESENTED. ITS MUCOUS MEMBRANE IS COVERED BY STRATIFIED SQUAMOUS NON-KERATINIZING EPITHELIUM. WHAT ORGAN IS THIS?

**ESOPHAGUS** 

**DUODENUM** 

COLON

**UTERUS** 

**APPENDIX** 

PERNICIOUS ANEMIA WAS DEVELOPED IN PATIENTS AFTER GASTRECTOMY. THE ABSENCE OF WHAT CELLS OF THE GASTRIC GLANDS CAUSES THIS PATHOLOGY?

**PARIETAL** 

**CHIEF** 

**CERVICAL MUCOCYTES** 

**ENDOCRINOCYTES** 

**GOBLET** 

ON HISTOLOGICAL SLIDE SUBMUCOSA OF THE SMALL INTESTINE IS FILLED BY SECRETORY PORTIONS OF PROTEIN GLANDS. WHAT DEPARTMENT OF THE SMALL INTESTINE IS PRESENTED IN THE SLIDE?

DUODENUM.

**COLON** 

**HUNGRY GUT** 

**ILEUM** 

**APPENDIX** 

ON HISTOLOGICAL SLIDE OF THE SMALL INTESTINE WALL GROUPS OF CELLS WERE FOUND THAT ARE LOCATED AT THE BOTTOM OF THE CRYPTS, HAVE BASOPHILIC CYTOPLASM AND ACIDOPHILIC SECRETORY GRANULES IN THE APICAL PART. WHAT ARE CELLS?

PANETH CELLS

**CELLS WITHOUT BRUSH BORDER** 

**ENDOCRINE CELLS** 

**GOBLET CELLS** 

**COLUMNAR WITH BRUSH BORDER** 

IN HISTOLOGICAL SLIDE PARENCHYMA OF THE ORGAN IS REPRESENTED BY HEXAGONAL LOBULES, WHICH CONSIST OF ANASTOMOSING PLATES, BETWEEN WHICH RADIAL SINUSOIDAL CAPILLARIES ARE. WHAT ORGAN HAS THIS MORPHOLOGICAL STRUCTURE?

**LIVER** 

**PANCREAS** 

**THYMUS** 

**SPLEEN** 

LYMPH NODE

THE PATIENT HAS A VIOLATION OF THE ENDOCRINE FUNCTION OF THE PANCREAS, WHICH IS MANIFESTED IN THE DECREASE OF BLOOD LEVEL OF THE HORMONE GLUCAGON. THE FUNCTION OF WHAT GLAND CELLS IS VIOLATED IN THIS CASE?

A-CELLS OF THE LANGERHANS ISLETS

**B-CELLS OF THE LANGERHANS ISLETS** 

**D-CELLS OF THE LANGERHANS ISLETS** 

**D1-CELLS OF THE LANGERHANS ISLETS** 

PP-CELLS OF THE LANGERHANS ISLETS

PATIENT SINCE THE 14 YEARS HAS DIABETES. WHAT CELLS OF THE PANCREAS DO NOT FUNCTION?

B - CELLS

A - CELLS

D - CELLS

D1 CELLS

PP - CELLS

NEWBORN HAS VIOLATION OF DIGESTING OF THE BREAST MILK. VIOLATION OF WHAT GASTRIC GLANDS CELLS IS

**OBSERVED?** 

**CHIEF EXOCRINOCYTES** 

PARIETAL EXOCRINOCYTES

**CERVICAL MUCOCYTES** 

ADDITIONAL MUCOCYTES

**EXOCRINOCYTES** 

IN THE APICAL PART OF CYTOPLASM OF THE PANCREATIC CELLS THE SECRETORY GRANULES APPEAR AND DISAPPEAR IN THE SECRETORY CYCLE. TO WHICH STRUCTURAL ELEMENTS GRANULES BELONG?

**INCLUSIONS** 

**MICROFILAMENTS** 

LYSOSOMES

**EXOCYTOTIC VACUOLES** 

GRANULAR ENDOPLASMIC RETICULUM

FOCAL GASTRIC EPITHELIAL DAMAGE OCCURRED AFTER EXPOSURES OF THE HARMFUL FACTORS. WHICH CELLS ARE RESPONSIBLE FOR REGENERATION?

**CERVICAL MUCOCYTES** 

PARIETAL EXOCRINOCYTES

**CHIEF EXOCRINOCYTES** 

**ENDOCRINOCYTES** 

MUCOCYTES OF GLANDS BODY

ON HISTOLOGICAL SLIDE OF THE FUNDUS GLANDS LARGE CELLS WITH ACIDOPHILIC CYTOPLASM AND COMPLEX SYSTEM OF INTRACELLULAR TUBULES ARE VISIBLE. WHICH COMPONENT OF THE GASTRIC JUICE THESE CELLS FORM? HYDROCHLORIC ACID

**PEPSINOGEN** 

**MUCUS** 

**SEROTONIN** 

**GASTRIN** 

50 YEARS OLD PATIENT HAS AN ELEVATED LEVEL OF BLOOD SUGAR. WITH DYSFUNCTION OF WHICH CELL DEVELOPMENT OF THIS DISEASE IS ASSOCIATED?

**B** –CELLS

A -CELL

**THYROCYTES** 

**PANKREOCYTES** 

LIPOTROPOCYTES

LONG COURSE OF TREATMENT WITH ASPIRIN WAS APPOINTED TO THE PATIENTS WITH RHEUMATIC FEVER. WHICH STRUCTURAL COMPONENT OF THE GASTRIC MUCOSA WILL PROTECT FROM DAMAGE IN THE GREATEST MEASURE?

SIMPLE COLUMNAR GLANDULAR EPITHELIUM

**CONNECTIVE TISSUE** 

**MUSCLE TISSUE** 

STRATIFIED CILIATED EPITHELIUM

STRATIFIED SQUAMOUS NON-KERATINIZING EPITHELIUM

IN HISTOLOGICAL SLIDE OF THE GLANDULAR ORGAN SEROUS SECRETORY UNITS ARE DETERMINED ONLY. DUCTS WHITH DOUBLE-LAYERED OR STRATIFIED EPITHELIUM ARE VISIBLE IN INTERLOBULAR CONNECTIVE TISSUE. WHAT ORGAN IS THIS?

**PAROTID** 

SUBMANDIBULAR GLAND

**PANCREAS** 

SUBLINGUAL SALIVARY GLAND

**LIVER** 

IN THE ELECTRON MICROGRAPHS OF THE FUNDUS GASTRIC GLAND THE LARGE OVAL CELL IS VISIBLE. CYTOPLASM CONTAINS A SYSTEM OF INTRACELLULAR SECRETORY TUBULES, NUMEROUS MITOCHONDRIA. CALL THIS CELL. PARIETAL

**CHIEF** 

UNDIFFERENTIATED

**MUCOUS** 

**EXOCRINE** 

CHANGES IN THE SOFT PALATE AND UVULA WERE IDENTIFIED IN A PATIENT WITH DIPHTHERIA. WHAT EPITHELIUM WAS INJURED?

STRATIFIED SQUAMOUS

PSEUDOSTRATIFIED COLUMNAR

SIMPLE SQUAMOUS

SIMPLE COLUMNAR

**CUBOIDAL** 

SURFACE EPITHELIUM OF THE STOMACH MUCOSA IS DAMAGED BY INFLAMMATORY DISEASES. WHAT TYPE OF THE

EPITHELIUM IS DAMAGED?

SIMPLE CYLINDRICAL GLANDULAR

SIMPLE SQUAMOUS

SIMPLE CUBOIDAL WITH MICROVILLI

SIMPLE CUBOIDAL

STRATIFIED CUBOIDAL

VIOLATION OF DIGESTION AND ABSORPTION OF PROTEINS IN THE SMALL INTESTINE AS A RESULT OF DEFICIENCY IN INTESTINAL JUICE DIPEPTIDASE WERE DETECTED IN PATIENTS WITH CHRONIC ENTEROCOLITIS (INFLAMMATION OF THE INTESTINE). WHICH CELLS HAVE VIOLATION OF THE SYNTHESIS OF THESE ENZYMES?

**PANETH CELLS** 

**COLUMNAR WITH A BRUSH BORDER** 

**COLUMNAR WITHOUT BRUSH BORDER** 

**GOBLET** 

**ENDOCRINOCYTES** 

SUCTION (ABSORPTION) FUNCTION IS DISRUPTED IN DISEASES OF THE SMALL INTESTINE MUCOSA. WHAT

EPITHELIUM IS RESPONSIBLE FOR THIS FUNCTION? SIMPLE COLUMNAR WITH BRUSH BORDER

SIMPLE CUBOIDAL

SIMPLE COLUMNAR CILIATED

STRATIFIED SQUAMOUS

STRATIFIED CUBOIDAL

PATIENT WITH DISEASES OF THE SMALL INTESTINE HAS A VIOLATION OF THE LUMINAL AND MEMBRANE DIGESTIONS. FUNCTIONS OF WHAT CELLS ARE VIOLATED?

COLUMNAR WITH BRUSH BORDER
COLUMNAR WITHOUT BRUSH BORDER
GOBLET
PANETH CELLS
ENDOCRINOCYTES

ABSENCE OF SPECIFIC STRUCTURES OF A RELIEF OF THE SMALL INTESTINE IS OBSERVED AT ENDOSCOPIC EXAMINATION OF THE PATIENT WITH CHRONIC ENTEROCOLITIS (INFLAMMATION OF THE INTESTINE). WHAT COMPONENTS DETERMINE THE RELIEF OF THE MUCOUS MEMBRANE OF THE ORGAN? THE CIRCULAR FOLDS, VILLI AND CRYPTS FIELDS, FOLDS, PITS GAUSTRY, VILLI, CRYPTS SPIRAL FOLDS FIELDS, VILLI

SOME DISEASES OF THE SMALL INTESTINE ARE ASSOCIATED WITH DYSFUNCTION OF THE EXOCRINOCYTES WITH ACIDOPHILIC GRANULES (PANETH CELLS). WHERE THIS CELLS ARE?
AT THE BOTTOM OF INTESTINAL CRYPTS
AT THE APICAL PART OF THE INTESTINAL VILLI
ON THE LATERAL SURFACES OF THE INTESTINAL VILLI
AT THE TRANSITION OF THE VILLI IN THE CRYPT
IN THE UPPER PART OF INTESTINAL CRYPTS

QUANTITATIVE RELATIONSHIPS BETWEEN THE EPITHELIOCYTES OF THE MUCOSE ARE CHANGED IN SOME DISEASES OF THE LARGE INTESTINE. WHAT TYPES OF CELLS PREDOMINATE IN THE EPITHELIUM OF THE CRYPTS OF THE LARGE INTESTINE IS NORMAL?

GOBLET CELLS
COLUMNAR VILLOUS EPITHELIOCYTES
ENDOCRINOCYTES
CELLS WITH ACIDOPHILIC GRANULES
UNDIFFERENTIATED CELLS

FROM THE BOTTOM TO THE TOP

TUMOR THAT HAS ORIGIN FROM THE MUCOSE OF THE RECTUM (ANAL REGION) WAS DETECTED DURING RECTOROMANOSCOPY. FROM WHAT EPITHELIUM THIS TUMOR WAS FORMED?

STRATIFIED SQUAMOUS NON-KERATINIZING
SIMPLE COLUMNER GLANDULAR
SIMPLE COLUMNER WITH BRUSH BORDER
SIMPLE CUBOIDAL
TRANSITIONAL EPITHELIUM

ANOMALY OF THE LIVER DEVELOPMENT WAS DETECTED DURING EXAMINATION OF THE PATIENT. WHAT EMBRYONIC SOURCE WAS DAMAGED?
ENDODERM OF THE MIDDLE PART OF PRIMITIVE GUT
ENDODERM OF THE DORSAL WALL OF THE PRIMITIVE GUT
FOREGUT OF THE ENDODERM
MEZONEPHRIC DUCT
ENDODERM OF THE HINDGUT

BLOOD CIRCULATION IN CLASSICAL LOBULES IS DISTURBED BY PROLIFERATION OF CONNECTIVE TISSUE IN THE PARENCHYMA OF THE LIVER (FIBROSIS) DUE TO CHRONIC DISEASE. WHAT IS THE DIRECTION OF MOVEMENT OF THE BLOOD IN THE LOBULES?
FROM THE PERIPHERY TO THE CENTER
FROM THE CENTER TO THE PERIPHERY
AROUND THE LOBULES
FROM THE TOP TO THE BOTTOM

INCREASE IN THE NUMBER OF THE GLANDULOCYTES WITH OXYPHILIC CYTOPLASM REVEALED BY HISTOLOGICAL EXAMINATION OF THE ASPIRATION BIOPSY OF THE GASTRIC MUCOSA IN A PATIENT SUFFERING FROM PEPTIC ULCER. WHICH COMPONENT OF THE GASTRIC JUICE THESE CELLS PRODUCE?

HYDROCHLORIC ACID

**MUCUS** 

**PEPSINOGEN** 

**GASTRIN** 

**SECRETIN** 

CERTAIN CELLS OF THE PANCREAS ARE IN A STATE OF TENSION IN PEOPLE WHO EAT A LOT OF SWEETS. WHAT CELLS

B -CELLS

A -CELL

**D-CELLS** 

**PP-CELLS** 

**ACINUS** 

IN HISTOLOGICAL SLIDE ORGAN OF THE DIGESTIVE TRACT IS VISIBLE. ITS WALL CONSISTS OF FOUR LAYERS: MUCOSA, SUBMUCOSA, MUSCLE AND SEROSA. THE MUCOUS HAS FOLDS AND PITS. WHAT ORGAN HAS THIS RELIEF?

**STOMACH** 

**ESOPHAGUS** 

**DUODENUM** 

**SMALL INTESTINE** 

**APPENDIX** 

IN HISTOLOGICAL SLIDE A SECTION OF THE DIGESTIVE TUBE WALL IS REPRESENTED. MUCOSAL RELIEF IS PRESENTED BY PITS. THE SURFACE OF THE PITS IS COVERED BY EPITHELIUM, IN WHICH ALL CELLS LIE ON A BASAL MEMBRANE, HAVE A COLUMNAR SHAPE, THE APICAL PART OF THE CELLS IS FILLED WITH DROPLETS OF MUCOID SECRETIONS. DETERMINE WHAT ORGAN HAS THIS EPITHELIUM.

**STOMACH** 

**SMALL INTESTINE** 

**COLON** 

**ESOPHAGUS** 

**APPENDIX** 

IN HISTOLOGICAL SLIDE ORGAN IS VISIBLE, IN THE LAMINA PROPRIA OF WHICH SIMPLE TUBULAR GLANDS, CONSISTING MAINLY OF CHIEF, PARIETAL, MUCOUS AND ENDOCRINE CELLS, ARE LOCATED. INDICATE THE TYPE OF THE GLANDS.

FUNDIC GLANDS OF THE STOMACH

PYLORIC GLANDS OF THE STOMACH

CARDIAC GLANDS OF THE STOMACH

**ESOPHAGUS GLANDS PROPER** 

CARDIAC GLANDS OF THE ESOPHAGUS

IN HISTOLOGICAL SLIDE GLAND IS VISIBLE. IN THE LOBULES ACINI, SECRETORY CELLS OF WHICH HAVE TWO ZONES: THE BASE - HOMOGENEOUS BASOPHILIC AND APICAL - ZYMOGENS OXYPHILOUS, ARE PRESENTED. WHAT BODY HAS THESE MORPHOLOGICAL FEATURES?

**PANCREAS** 

**LIVER** 

PAROTID GLAND

SUBMANDIBULAR GLAND

SUBLINGUAL SALIVARY GLAND

LOBULES WITH UNCLEAR BORDERS, CENTRAL VEIN INSIDE AND RADIALLY DIRECTED TRABECULAE, ARE THE STRUCTURAL UNITS OF SOME ORGAN. LOBULE IS LIMITED BY INTERLOBULAR ARTERIES, VEINS, AND BILE DUCTS (TRIAD). WHICH ORGAN IS THIS?

**LIVER** 

THYROID GLAND

PANCREAS
PAROTID GLAND
KIDNEY

THE PATIENT WITH CHRONIC ATROPHIC GASTRITIS HAS SYMPTOMS OF HYPOCHROMIC ANEMIA. VIOLATION OF FUNCTION OF WHAT CELLS OF THE GASTRIC GLANDS CAN EXPLAIN THE DEVELOPMENT OF THE ANEMIA?

PARIETAL CELLS

**CHIEF CELLS** 

ADDITIONAL CELLS

**CERVICAL CELLS** 

**ENDOCRINE CELLS** 

THE PATIENT HAS A LOW GASTRIC ACIDITY. WHAT CELLS OF THE GASTRIC GLANDS CAUSED THIS CONDITION? PARIETAL

**CHIEF** 

**MUCOUS** 

**ENDOCRINE** 

**CERVICAL** 

PROCESS OF KERATINIZATION OF THE EPITHELIUM WAS FOUND IN BIOPSY OF THE MUCOUS OF A ESOPHAGUS OF THE PATIENT. WHICH OF THE FOLLOWING TYPES OF EPITHELIUM COVERING THE MUCOUS MEMBRANE OF THIS ORGAN IS NORMAL?

STRATIFIED SQUAMOUS NON-KERATINIZING

SIMPLE SQUAMOUS

**PSEUDOSTRATIFIED CILIATED** 

SIMPLE COLUMNER

STRATIFIED SQUAMOUS KERATINIZING

SIGNIFICANT IMPAIRMENT OF A PROCESS OF REGENERATION OF A EPITHELIUM OF A MUCOUS MEMBRANE OF A SMALL INTESTINE WAS FOUND IN CANCER PATIENTS AFTER RADIOTHERAPY. WHAT CELLS OF THE EPITHELIUM WERE DAMAGED?

COLUMNAR EPITHELIOCYTES WITHOUT BRUSH BORDER IN THE CRYPTS

COLUMNAR EPITHELIOCYTES WITH BRUSH BORDER

**GOBLET EXOCRINOCYTES** 

**ENDOCRINE CELLS** 

**EXOCRINOCYTES WITH ACIDOPHILIC GRAININESS (PENNETA)** 

PERNICIOUS ANEMIA DEVELOPED IN PATIENT AFTER RADIATION THERAPY FOR CANCER OF A STOMACH. REASON - DAMAGE TO CELLS THAT PRODUCE INTRINSIC FACTOR. WHICH OF THE CELLS OF THE GASTRIC GLANDS WERE DAMAGED?

PARIETAL CELLS

CHIEF EXOCRINOCYTES

**CERVICAL MUCOCYTES** 

**ENDOCRINOCYTES** 

ADDITIONAL MUCOCYTES

DOCTOR FOUND SYNDROME OF ACUTE ENTEROCOLITIS (INFLAMMATION OF THE SMALL INTESTINE) WITH VIOLATION OF THE PROCESSES OF DIGESTION AND ABSORPTION OF THE PRODUCTS IN THE PATIENT. DAMAGE OF WHAT INTESTINAL EPITHELIAL CELLS ARE RESPONSIBLE FOR SUCH VIOLATIONS?

COLUMNAR EPITHELIOCYTES WITH BRUSH BORDER

COLUMNAR EPITHELIOCYTES WITHOUT BRUSH BORDER

**GOBLET EXOCRINOCYTES** 

**ENDOCRINE CELLS** 

**EXOCRINOCYTES WITH ACIDOPHILIC GRAININESS** 

PROTEINS ARE POORLY DIGESTED IN THE STOMACH OF THE PATIENT. ANALYSIS OF GASTRIC JUICE SHOWED LOW ACIDITY. THE FUNCTION OF WHAT STOMACH CELLS IS BROKEN IN THIS CASE?

PARIETAL CELLS

CHIEF EXOCRINOCYTES
MUCOCYTES
ENDOCRINOCYTES
CERVICAL MUCOCYTES

CHEMICAL BURN OF A UPPER SURFACE OF A TONGUE OCCURRED IN THE GIRL 15 YEARS OLD. WHAT EPITHELIUM IS DAMAGED BY THIS?

STRATIFIED SQUAMOUS PARTIALLY NON-KERATINIZING

SIMPLE LOW COLUMNER

**PSEUDOSTRATIFIED CILIATED** 

**TRANSITIONAL** 

SIMPLE SQUAMOUS

TOTAL HYPERACIDITY WAS FOUND IN WOMEN 56 YEARS OLD DURING PH-METRY OF GASTRIC JUICE. WITH DYSFUNCTION OF WHICH CELLS OF THE GASTRIC GLANDS IT CAN BE CONNECTED?

PARIETAL CELLS

**CHIEF EXOCRINOCYTES** 

**CERVICAL MUCOCYTES** 

ADDITIONAL MUCOCYTES

**ENDOCRINOCYTES** 

ULCER FORMED IN THE SMALL INTESTINE OF THE PATIENT AFTER RADIATION THERAPY FOR TUMORS OF THE LIVER. REASON - INHIBITION OF MITOTIC ACTIVITY OF THE CELLS THAT ARE RESPONSIBLE FOR THE REGENERATION OF THE SURFACE EPITHELIUM OF THE SMALL INTESTINE. NAME THESE CELLS.

COLUMNAR EPITHELIOCYTES WITHOUT BRUSH BORDER IN CRYPTS

**COLUMNAR EPITHELIOCYTES** 

**GOBLET EXOCRINOCYTES** 

**ENDOCRINE CELLS** 

**EXOCRINOCYTES WITH ACIDOPHILIC GRAININESS** 

THE PATIENT COMPLAINS OF PAIN IN THE STOMACH. GASTROSCOPY REVEALED THE PRESENCE OF SMALL-SIZED ULCERS IN THE FUNDUS OF THE STOMACH. VIOLATION OF FUNCTION OF WHICH CELLS OF THE GASTRIC MUCOSA WAS ONE OF THE REASONS OF MUCOSAL DAMAGE?

SURFACE EPITHELIUM CELL PRODUCING MUCOUS SECRETION

PARIETAL CELLS OF THE GASTRIC GLANDS THAT PRODUCE CHLORIDE AND HYDROGEN IONS

CHIEF EXOCRINOCYTES PRODUCING PEPSINOGEN

**ENDOCRINOCYTES PRODUCING SOMATOSTATIN** 

**ENDOCRINOCYTES PRODUCING SEROTONIN** 

THE MUCOUS EPITHELIUM OF THE ESOPHAGUS OF THE PATIENT HAS BEEN DAMAGED DUE TO BURN ACETIC ESSENCE. WHAT CELLS OF THE SURFACE EPITHELIUM ARE THE SOURCE OF REPARATIVE REGENERATION? BASAL CELLS

**SQUAMOUS CELLS** 

SPINOSUM CELLS

CILIATED CELLS

**ENDOCRINE CELLS** 

FURRED TONGUE (EXCESS OF KERATINIZATION) WAS FOUND IN PATIENTS WITH CHRONIC GASTRITIS BY EXTERNAL EXAMINATION. THE REASON - AMPLIFICATION PROCESS OF KERATINIZATION. IN WHICH TONGUE PAPILLAE EPITHELIUM CAN KERATINIZING?

FILIFORM PAPILLAE

**FUNGIFORM PAPILLAE** 

CIRCUMVALLATE PAPILLAE

**FOLIATE PAPILLAE** 

PAPILLARY LAYER

IN HISTOLOGICAL SLIDE A MUCOSA OF THE ORGAN IS REPRESENTED. COLUMNER CELLS WITH BRUSH BORDER AND GOBLET CELLS ARE DEFINED ON THE SURFACE OF THE VILLI IN THE EPITHELIAL LAYER. WHAT ORGAN HAS THESE CELLS?

**SMALL INTESTINE** 

**STOMACH** 

LARGE INTESTINE

**URETERAL** 

**BRONCHUS** 

SUBSTANTIAL REDUCTION OR FULL ABSENCE OF PARIETAL CELLS IN THE STOMACH GLANDS WAS OBSERVED IN PATIENT BIOPSY MATERIAL. MUCOSA OF WHAT STOMACH AREA WAS STUDIED?

**PYLORUS** 

**FUNDUS** 

CARDIAC DEPARTMENT

**BODY OF STOMACH** 

TRANSITION ESOPHAGUS INTO THE STOMACH

IN HISTOLOGICAL SLIDE A ORGAN OF A ORAL CAVITY IS VISIBLE, ITS ANTERIOR SURFACE IS LINED BY STRATIFIED SQUAMOUS NON-KERATINIZING EPITHELIUM AND A POSTERIOR SURFACE - PSEUDOSTRATIFIED CILIATED EPITHELIUM. WHAT IS THIS BODY?

**SOFT PALATE** 

**LANGUAGE** 

HARD PALATE

LIP

**CHEEK** 

EXTENSIVE DAMAGE OF THE EXCRETORY ACINAR CELLS IS DEFINED IN PATIENTS AFTER ACUTE PANCREATITIS. WHAT CELLS ARE RESPONSIBLE FOR THE REGENERATION?

**CELLS OF INTERCALATED DUCTS** 

**CELLS OF ISLETS OF LANGERHANS** 

**CELLS OF INTRALOBULAR DUCTS** 

STROMAL CELLS

VASCULAR ENDOTHELIUM

CELLS FORMING THE WALL OF THE BILE CAPILLARIES WERE AFFECTED BY VIRAL INFECTION. ITS CREATED THE CONDITIONS FOR THE GETTING OF A BILE INTO A BLOOD OF SINUSOIDAL CAPILLARIES. WHAT CELLS ARE DAMAGED? HEPATOCYTES

**KUPFFER CELLS** 

**ITO-CELLS** 

**RIT-CELLS** 

**ENDOTHELIOCYTES** 

WELL-DEVELOPED GRANULAR ENDOPLASMIC RETICULUM IS DETERMINED IN THE CYTOPLASM OF THE "DARK" HEPATOCYTES DURING ULTRAMICROSCOPIC STUDY. WHAT IS THE FUNCTION OF THIS ORGANELLE IN THESE CELLS? SYNTHESIS OF PLASMA PROTEINS

SYNTHESIS OF CARBOHYDRATES

**DETOXIFICATION** 

PRODUCTION OF BILE

STORAGE OF CALCIUM IONS

FULL UPDATE OF THE SMALL INTESTINE EPITHELIUM OCCURS WITHIN 3 DAYS DUE TO ACTIVE PROLIFERATION OF UNDIFFERENTIATED CELLS. INDICATE THEIR LOCALIZATION.

**BOTTOM OF THE CRYPTS** 

TOP OF THE VILLI

**BASE OF THE VILLI** 

LATERAL SURFACE OF THE VILLI

LAMINA PROPRIA

INSULIN INJECTION FOR EVALUATION OF THE COMPLETENESS OF VAGOTOMY IS ACCOMPANIED BY A SIGNIFICANT INCREASE IN THE ACIDITY OF GASTRIC JUICE. WHAT CELLS OF THE GASTRIC GLANDS PROVIDE THIS PROCESS? PARIFTAL

**ENDOCRINE** 

**CHIEF** 

**MUCOSAL** 

**CERVICAL** 

DAMAGE TO THE EPITHELIUM OF THE EXCRETORY DUCTS OF THE SALIVARY GLANDS IS OBSERVED IN CHRONIC INFLAMMATORY PROCESSES. WHAT EPITHELIUM WILL BE DAMAGE IN THE STRIATED DUCTS OF THE MAJOR SALIVARY GLANDS?

COLUMNER EPITHELIUM WITH BASAL STRIATION SQUAMOUS EPITHELIUM WITH BASAL STRIATION CUBOIDAL EPITHELIUM WITH BASAL STRIATION DOUBLE LAYER WITH BASAL STRIATION STRATIFIED CUBOIDAL

THE BABY GETS BREAST MILK. WHAT HISTOLOGICAL STRUCTURES OF THE ORAL CAVITY WERE ADAPTED FOR STIMULATION OF THE NIPPLE BREAST, CAUSING REFLEX MILK FLOW?

**EPITHELIAL VILLI OF THE LIPS** 

STRATIFIED SQUAMOUS KERATINIZING EPITHELIUM OF THE LIPS

THE CONNECTIVE PAPILLAE OF THE LIPS

FUNGIFORM PAPILLAE OF THE TONGUE

FOLIATE PAPILLAE OF THE TONGUE

TISSUE, LOCATED AT THE TOP OF THE TOOTH ROOT AND THE POINT OF BRANCHING OF THE ROOTS, IS VISIBLE IN THE THIN SECTION OF TOOTH. THE TISSUE CONTAINS CELLS WITH PROCESS LYING IN LACUNAE, AND NUMEROUS COLLAGEN FIBERS HAVING A RADIAL OR LONGITUDINAL DIRECTION. CALL THIS TISSUE.

**CELLULAR CEMENT** 

RETIKULOFIBROUS BONE TISSUE

DENTIN

**ENAMEL** 

**DENSE CONNECTIVE TISSUE** 

DEPOSITIONS OF HYDROXYAPATITE CRYSTALS THAT LOOK LIKE GLOBULES ARE VISIBLE IN HISTOLOGICAL SLIDE OF THE TOOTH HISTOGENESIS. FOR WHICH TOOTH TISSUE THIS TYPE OF MINERALIZATION IS TYPICAL?

**DENTIN** 

**ENAMEL** 

**PERIODONTAL** 

CEMENT

**PULP** 

EPITHELIUM OF THE STOMACH MAY CHANGE UNDER THE INFLUENCE OF VARIOUS HARMFUL FACTORS THAT CAN CAUSE STOMACH ULCERS. WHAT EPITHELIUM IS DAMAGED?

SIMPLE CYLINDRICAL GLANDULAR

STRATIFIED SQUAMOUS NON-KERATINIZING

SIMPLE SQUAMOUS

SIMPLE CUBOIDAL

**PSEUDOSTRATIFIED COLUMNER** 

WHICH DEPARTMENTS OF THE FACIAL SKULL UNDERDEVELOPMENT IN THE EMBRYONIC PERIOD LEADS TO A MALFORMATION AS "CLEFT PALATE"?

PALATINE PROCESSES

FRONTAL PROCESS

FRONTAL AND MAXILLARY PROCESSES

MANDIBULAR PROCESSES

MANDIBULAR AND PALATINE PROCESSES

WALL OF THE ORGAN OF THE DIGESTIVE SYSTEM IS PRESENTED IN THE HISTOLOGICAL SLIDE. NUMEROUS LYMPHOID NODULES ARE IN THE LAMINA PROPRIA AND SUBMUCOSA. CALL THIS ORGAN.

**APPFNDIX** 

**STOMACH** 

**DUODENUM** 

**JEJUNUM** 

**COLON** 

HEPATIC ARTERY WAS DAMAGED AS A RESULT OF STAB WOUNDS. BUT THE BLOOD CONTINUES TO FLOW INTO THE HEPATIC LOBULE. WHAT A VESSEL PROVIDES THE BLOOD FLOW IN LOBULES?

PORTAL VENULE (BRANCHE OF THE HEPATIC PORTAL VEIN)

**INTERLOBULAR ARTERY** 

PORTAL ARTERIOLA

SUBLOBULAR VIENNA

**HEPATIC VIENNA** 

GRANULAR EPS WAS DESTROYED IN HEPATOCYTES BY THE IMPACT OF HEPATOTROPIC POISON. SYNTHESIS OF WHICH SUBSTANCES WILL BE BROKEN IN THE EPITHELIUM OF THE LIVER?

ALBUMINS AND FIBRINOGEN

**PHOSPHOLIPIDS** 

**GLYCOGEN** 

**CHOLESTEROL** 

**VITAMINS** 

GROUP OF CELLS ARE VISIBLE IN HISTOLOGICAL SLIDE OF THE PANCREAS. SOME OF THEM ARE SITUATED CENTRALLY AND HAS BASOPHILIC SECRETORY GRANULES. THEIR SECRET REGULATES CARBOHYDRATE METABOLISM. CALL THESE CELLS.

**B** –CELLS

**PP-CELLS** 

A -CELL

**ADIPOCYTES** 

**D-CELLS** 

STRIATED MUSCLE TISSUE OF AN ORGAN OF THE DIGESTIVE SYSTEM IS REVEALED BY MICROSCOPIC EXAMINATION. FROM WHAT ORGAN BIOPSY WAS TAKEN?

**ESOPHAGUS** 

**STOMACH** 

**JEJUNUM** 

**ILEUM** 

**APPENDIX** 

THE INNER LAYER OF THE EPITHELIUM OF THE ENAMEL ORGAN IN THE TOOTH GERM WAS DESTROYED IN ANIMAL EXPERIMENT. THE DEVELOPMENT OF WHAT TISSUE OF A TOOTH IS BROKEN?

**ENAMELS** 

**DENTIN** 

**CEMENT** 

**PULP** 

PERIODONTAL

GRANULES CONTAINING DIPEPTIDASES AND LYSOZYME HAVE BEEN FOUND IN THE CYTOPLASM OF EPITHELIAL CELLS OF INTESTINAL CRYPTS BY HISTOCHEMICAL METHODS. INDICATE THESE CELLS.

PANETH CELLS

**COLUMNAR EPITHELIAL CELLS** 

**GOBLET EXOCRINOCYTES** 

A -CELLS

S-CELLS

THE PATIENT HAS A VIOLATION OF TASTE SENSATION. THE TOTAL SENSITIVITY IS MAINTAINED. WHAT PAPILLAE ARE

**NOT DAMAGED?** 

FILIFORM PAPILLAF

CIRCUMVALLATE PAPILLAE

**FUNGIFORM PAPILLAE** 

**FOLIATE PAPILLAE** 

ALL

CANALICULI ARE VISIBLE IN THE DENTIN ON LONGITUDINAL SECTIONS OF THE TOOTH. WHAT IS CONTAINED WITHIN

THE TUBULES?

PROCESSES OF DENTINOBLASTS

PROCESSES OF ENAMELOBLASTS

**BODIES OF DENTINOBLASTS** 

**FIBROBLASTS** 

**ELASTIC FIBERS** 

THE PATIENT IS TREATED FOR CHRONIC GASTRITIS FOR A LONG TIME. CHANGES IN THE MUCOSAL EPITHELIUM OF

THE STOMACH ARE OBSERVED BY ENDOSCOPY. WHAT EPITHELIUM IS CHANGED?

SIMPLE COLUMNER GLANDULAR

SIMPLE COLUMNER WITH BRUSH BORDER

SIMPLE COLUMNER CILIATED

PSEUDOSTRATIFIED COLUMNER

SIMPLE SQUAMOUS

ONE OF THE ORGAN OF THE ORAL CAVITY LOOKS LIKE A FEW FOLDS OF MUCOUS MEMBRANE, IN THE LAMINA

PROPRIA OF WHICH NUMEROUS LYMPHOID FOLLICLES ARE. WHAT IS THE BODY?

PALATINE TONSILS

**TONGUE** 

PAROTID GLAND

SUBLINGUAL GLANDS

SUBMANDIBULAR GLAND

AS WE KNOW, THE SUBMANDIBULAR GLAND HAS MUCOUS GLANDULAR PORTION, CONSISTING OF MUCOCYTES.

WHAT FEATURES ARE CHARACTERISTIC FOR THESE CELLS?

FLATTENED NUCLEI AND CLEAR CYTOPLASM

**BASOPHILIC CYTOPLASM** 

ROUNDED NUCLEI IN THE CENTER OF THE CELL

**MICROVILLI** 

**BASAL STRIATION** 

ANALYSIS OF BIOPSIES OF THE GASTRIC MUCOSA OF A PATIENT WITH GASTRITIS SHOWED A SHARP DECREASE IN THE

NUMBER OF PARIETAL CELLS. HOW DOES IT EFFECT ON THE FOLLOWING COMPONENTS OF GASTRIC JUICE?

**DECREASE OF ACIDITY** 

**INCREASE OF ACIDITY** 

INCREASE OF GASTRIC JUICE

REDUCTION OF GASTRIC JUICE

DECREASE OF MUCUS PRODUCTION

MORPHOLOGICAL FEATURES OF A GUM ARE VISIBLE IN THE BIOPSY OF A ORAL MUCOSA. WHAT FEATURES OF THE

STRUCTURE OF THE MUCOUS MEMBRANE OF THE GUMS CAN BE OBSERVED IN NORMAL?

STATIONARY ADHERENT TO THE PERIOSTEUM, LAMINA PROPRIA FORMS THE HIGH PAPILLAE, LACK OF MUSCLE LAYER

LOW ADHERENT TO THE PERIOSTEUM, WELL DEFINED MUSCLE LAYER

ABSENT OF MUSCLE LAYER, SUBMUCOSA IS WELL DEVELOPED

PROPERTY AND MUSCLE MEMBRANES ARE MISSING

HOLDS A LOT OF SMALL SALIVARY GLANDS

SOME DISEASES OF THE SALIVARY GLANDS ARE CAUSED BY DYSFUNCTION OF THEIR EXCRETORY DUCTS. WHAT TYPES

OF THE EXCRETORY DUCTS PRESENT IN THE MAJOR SALIVARY GLANDS?

INTRA-, INTERLOBULAR DUCTS AND COMMON DUCT OF THE GLAND LOBULAR, STRIATED AND COMMON DUCTS INTERCALATED, DIVIDED AND COMMON DUCTS INTRA- AND INTERLOBULAR DUCTS COMMON DUCT

STRUCTURE OF THE ORAL CAVITY, WHICH HAS A MAXILLARY, MANDIBULAR AND INTERMEDIATE ZONE, IS DAMAGED BY TRAUMA. WHAT STRUCTURE IS TRAUMATIZED?

CHEEK

**TONGUE** 

LIP

HARD PALATE

**SOFT PALATE** 

THE PATIENT COMPLAINS OF DETERIORATION OF TASTE SENSITIVITY. DOCTOR NOTICED MUCOSAL ATROPHY OF SOME AREAS OF THE ORAL CAVITY DURING EXAMINATION. WHERE DO MORPHOLOGICAL CHANGES WERE OBSERVED MORE?

ON THE UPPER SURFACE OF THE TONGUE ON THE LOWER SURFACE OF THE TONGUE AT THE ROOT OF THE TONGUE IN THE HARD PALATE ON THE GUMS

ON HISTOLOGICAL SLIDE STRUCTURE OF BONE TISSUE, COVERED WITH A MUCOUS MEMBRANE WITH KERATINIZING STRATIFIED SQUAMOUS EPITHELIUM IS PRESENTED. IN ALL AREAS OF THE LAMINA PROPRIA COLLAGEN FIBERS FORM A POWERFUL BUNDLES, WOVEN INTO THE PERIOSTEUM. NAME THE STRUCTURE OF THE ORAL CAVITY? HARD PALATE

**GUMS** 

LIP

CHEEK

**TONGUE** 

THE PATIENT WENT TO THE DOCTOR WITH COMPLAINS OF FEVER UP TO THIRTY-EIGHT DEGREES, WEAKNESS, A PAIN IN THE LARYNX. ON EXAMINATION REVEALED THAT THE PATIENT'S TONGUE IS WITH WHITE COATE. WHAT ARE THE HISTOLOGICAL STRUCTURES OF THE TONGUE INVOLVED IN THE FORMATION OF EXCESSIVE KERATINIZATION? EPITHELIUM OF THE FILIFORM PAPILLAE

**EPITHELIUM OF FOLIATE PAPILLAE** 

THE EPITHELIUM OF FUNGIFORM PAPILLAE

EPITHELIUM OF CIRCUMVALLATE PAPILLAE

LAMINA PROPRIA OF TONGUE PAPILLAE

THE PATIENT SUFFERS FROM HEART ATTACKS. THE DOCTOR GAVE HIM A NITROGLYCERIN UNDER THE TONGUE. WHAT STRUCTURAL FEATURES OF THE ORAL MUCOSA ARE RESPONSIBLE FOR SUCH A POSSIBILITY OF MEDICATION? PERMEABILITY OF STRATIFIED SQUAMOUS NON-KERATINIZING EPITHELIUM

PERMEABILITY OF STRATIFIED SQUAMOUS KERATINIZING EPITHELIUM

PERMEABILITY OF STRATIFIED SQUAMOUS EPITHELIUM

PRESENCE OF THE TONGUE PAPILLAE

PRESENCE OF SALIVARY GLANDS

THE PATIENT HAS AN INCREASED ACIDITY OF GASTRIC JUICE. HYPERFUNCTION OF WHAT CELLS IN THE GLANDS OF THE GASTRIC MUCOSA LEADS TO THIS CONDITION?

PARIETAL EXOCRINOCYTES OF OWN GASTRIC GLANDS

EXOCRINOCYTES OF THE GASTRIC GLANDS

ADDITIONAL MUCOCYTES

GOBLET CELLS

EXOCRINE PANKREAOCYTES

STRUCTURE REPRESENTED BY MUCOSA AND HAVING A FREE PORTION AND ATTACHED PORTION, WHICH IS TIGHTLY ADHERENT TO THE PERIOSTEUM DEFINED IN THE ORAL CAVITY. EPITHELIUM - STRATIFIED SQUAMOUS KERATINIZING. LAMINA PROPRIA FORMS A LONG, DEEP JUTTING OUT INTO THE EPITHELIUM PAPILLAE. CALL THIS STRUCTURE.

**GUMS** 

HARD PALATE

LIP

CHEEK

**TONGUE** 

CELL, IN CYTOPLASM OF WHICH GRANULES THAT LOOK LIKE FRUIT PITS (STONES) ARE VISIBLE, PRESENTED AT THE ELECTRON MICROGRAPH OF INTRALOBULAR LIVER SINUSOID. WE KNOW THAT THIS IS A NATURAL KILLER CELL.

WHICH CELL IS?

PIT-CFLL

**HEPATOCYTE** 

**ENDOTHELIUM OF THE SINUSOID** 

STELLATE MACROPHAGE

PERISINUSOIDAL LIPOCYTE

SAGITTAL LINE DEFECT WAS DETECTED IN THE PALATE AFTER THE BIRTH OF A CHILD. IN WHAT PROCESS WILL THIS

AFFECT?

**SWALLOWING** 

**CHEWING** 

**DIGESTION** 

**BREATH** 

ARTICULATION

THE CHILD COMPLAINS OF A TOOTHACHE. DENTIST DIAGNOSED CARIOUS LESIONS OF ENAMEL. THE AMOUNT OF WHICH MINERAL SUBSTANCES DECREASES IN CARIOUS LESIONS:

PHOSPHOROUS, FLUORINE, CALCIUM

SODIUM, CALCIUM, POTASSIUM,

POTASSIUM, PHOSPHORUS, FLUORINE

MAGNESIUM, FLUORIDE, CALCIUM

PHOSPHORUS, MAGNESIUM, POTASSIUM

THE CELLS LOCATED AT THE BOTTOM OF THE CRYPT OF THE SMALL INTESTINE AND HAVING LARGE ACIDOPHILIC CYTOPLASM WITH SECRETORY GRANULES ARE VISIBLE IN THE ELECTRON MICROGRAPH. WHAT ARE THESE CELLS? PANETH CELLS

THE CELLS WITH BRUSH BORDER

**GOBLET CELL** 

**UNDIFFERENTIATED CELLS** 

**ENDOCRINE CELLS** 

THE EXCRETORY DUCT OF SUBMANDIBULAR GLAND IS SEEN ON HISTOLOGICAL PREPARATIONS. THE MUCOUS MEMBRANE OF THE DUCT IS LINED WITH SHORT CUBOIDAL EPITHELIUM WHOSE CELLS ARE WITH POORLY DEVELOPED ORGANELLES. WHAT IS THIS EXCRETORY DUCT?

INTERCALATED DUCT

STRIATED DUCT

INTERLOBULAR DUCT

MAIN EXCRETORY DUCT

**SECRETORY UNIT** 

THE DAMAGE OF SECRETORY UNITS OF THE PAROTID GLAND IS OBSERVED DURING ACUTE INFLAMMATION (PAROTITIS). WHICH CELLS DAMAGED?

SEROUS AND MYOEPITHELIAL CELLS

**SEROUS AND MUCOUS** 

**MYOEPITHELIAL** 

**SEROUS-MUCOUS** 

MUCOUS AND MYOEPITHELIAL

LIGHT AND DARK STRIPES OF WIDTH 100 MM, DIRECTED RADIALLY DEFINED ON HISTOLOGICAL SLIDE OF THE THIN SECTION OF TOOTH ENAMEL. NAME THESE STRIPES OF ENAMEL DEVELOPMENT.

LINES OF GUNTHER-SHREGER

**LINES OF RETZIUS** 

**PERIENAMEL** 

**ENAMEL PRISMS** 

**ENAMEL SPINDLES** 

THE STRATIFIED SQUAMOUS NONKERATINIZED EPITHELIUM DENSELY INFILTRATED WITH LYMPHOCYTES HAS BEEN FOUND DURING STUDYING THE HISTOLOGICAL PREPARATION OF THE ORAL MUCOSA. WHAT PORTION OF THE ORAL CAVITY IS MOST LIKELY REPRESENTED ON THE SLIDE?

THE MUCOSA OF THE TONSILS

THE MUCOSA OF THE LIPS

**BUCCAL MUCOSA** 

THE MUCOSA OF THE HARD PALATE

THE MUCOSA OF THE GUMS

THE BASIS OF THE ORGAN OF THE ORAL CAVITY FORMS BY STRIATED MUSCLE TISSUE. THREE PARTS ARE DISTINGUISHED ON THE HISTOLOGICAL SLIDE: SKIN, MUCOUS AND TRANSITIONAL ZONE. WHAT IS THIS STRUCTURE?

THE HARD PALATE

THE SOFT PALATE

**TONGUE** 

CHEEK

BASKET-LIKE CELLS WITH PROCESSES, WHICH EMBRACE TERMINAL SECRETORY UNITS OF PAROTID GLAND ARE VISIBLE IN HISTOLOGICAL SLIDE. WHAT IS THE FUNCTION OF MYOEPITHELIAL CELLS?

**CONTRACTILE** 

TROPHIC

**SUPPORT** 

**PROTECTIVE** 

**SECRETORY** 

WHICH LAYER OF THE EPITHELIUM WILL BE INVOLVED IN THE REGENERATION OF DAMAGED MUCOSA OF THE ESOPHAGUS AFTER BURNS OF THE ESOPHAGUS IF THE MUCOSAL LESION IS NOT DEEP.

BASAL

**SPINOUSUM** 

**GRANULARIS** 

INTERMEDIATE

**SUPERFICIAL** 

THE CLOTTING DISORDER WAS FOUND IN THE PATIENT OF THERAPEUTIC DEPARTMENT WITH SEVERE LIVER DISEASE. WHAT FUNCTION OF THE LIVER CAN BE AFFECTED IN THIS CASE?

**PROTEIN SYNTHESIS** 

**DETOXIFICATION** 

**ENDOCRINE** 

**PROTECTIVE** 

**BILE FORMATION** 

GASTRIC MUCOSA, DAMAGED UNDER THE INFLUENCE OF VARIOUS FACTORS CAN RECOVER ITS STRUCTURE. DUE TO WHICH CELLS OF THE GASTRIC PIT THE REGENERATION TAKE PLACE?

**NECK CELLS** 

**PARIETAL** 

PANETH CELLS

**CHIEF** 

**ENDOCRINE** 

THE PART OF EXOCRINE PANCREAS IS STUDIED IN HISTOLOGICAL SLIDE. THE CELLS OF PARENCHYMA CONTAIN SECRETORY GRANULES WITH ENZYMES. HOW THESE ENZYMES ENTER THE DIGESTIVE TRACT?

BY THE SYSTEM OF EXCRETORY DUCTS

ENTERS THE BLOODSTREAM

THROUGH THE LYMPH

BY AXON TRANSPORT

BY DENDRITIC TRANSPORT

THE DESTRUCTION OF THE CILIATED EPITHELIAL CELLS OF THE BRONCHI OCCURRED IN A WORKER OF CHEMICAL PRODUCTION AFTER INHALING OF CAUSTIC VAPOUR. WHICH CELLS WILL PARTICIPATE IN REGENERATION OF THE EPITHELIUM?

**BASAL CELL** 

**GOBLET CELLS** 

**ENDOCRINE CELLS** 

**CILIATED CELLS** 

**UNCILIATED CELLS** 

THE PATIENT, 55 YEARS, IS UNDER OBSERVATION OF THE ENDOCRINOLOGIST CONCERNING INFRINGEMENT OF ENDOCRINE FUNCTION OF A PANCREAS, THAT IS SHOWN BY DECREASE OF AMOUNT OF A GLUCAGON IN A BLOOD. FUNCTION OF WHAT CELLS OF ISLETS OF LANGERHANS IS BROKEN?

Α

D1

B D

PΡ

PATIENT HAS DIABETES MELLITUS FROM 14-TH YEARS OLD. WHAT CELLS OF ISLETS OF LANGERHANS OF A PANCREAS DO NOT FUNCTION?

В

D A

D1

PP

THE PATIENT, 50 YEARS, COMPLAINS OF RISING OF APPETITE, THIRST, DECREASE OF MASS OF A BODY, FATIGABILITY. DURING LABORATORY RESEARCH THE INCREASED GLUCOSE IN A BLOOD IS REVEALED. THE DEVELOPMENT OF DISEASE IS CONNECTED TO PATHOLOGY OF FUNCTIONOF WHAT CELLS?

**B-CELLS OF ISLANDS OF LANGERHANS** 

A - CELLS OF ISLANDS OF LANGERHANS

**THYROCYTES** 

**PANCREOCYTES** 

PP-CELLS OF ISLANDS OF LANGERHANS

AFTER CHEMICAL BURN OF A TONGUE LATERAL SURFACE THE TASTE SENSIBILITY OF THIS REGION WAS LOST. WHAT STRUCTURE OF A NEUROEPITHELIAL CELL PARTICIPATES IN THE RISE OF NERVE IMPULSE?

MICROVILLI ON APICAL SURFACE

LATERAL SURFACE

MICROVILLI OF BASAL SURFACE

**NUCLEUS** 

**BASAL MEMBRANE** 

ON A SLIDE OF A SPLEEN THE VESSEL IS SEEN. ITS WALL CONSISTS OF AN ENDOTHELIUM POSED ON A BASAL MEMBRANE, THE TUNICA MEDIA IS ABSENT, TUNICA EXTERNA GREW WITH CONNECTIVE TISSUE OF SPLEEN. NAME THIS VESSEL:

**UNMUSCULAR VEIN** 

**ARTERIOLE** 

MUSCULAR VEIN WITH WEAK DEVELOPMENT OF MUSCULAR ELEMENTS

**MUSCULAR ARTERY** 

## **ELASTIC ARTERY**

ANTIBODIES TO TYMOSINS BEEN HAVE INJECTED INTO AN ORGANISM OF AN EXPERIMENTAL ANIMAL. DIFFERENTIATION OF WHAT CELLS WILL BE DISTURBED FIRST OF ALL?

**T-LYMPHOCYTES** 

**MONOCYTES** 

**B-LYMPHOCYTES** 

**MACROPHAGES** 

**PLASMOCYTES** 

ON A TISSUE SPECIMEN ORGAN WITH LYMPHATIC NODULES IS REVEALED. THESE NODULES ARE POSED DIFFUSIVELY AND HAVE THE CENTRAL ARTERIES. WHAT ORGAN DOES HAVE THE SUCH STRUCTURE?

**SPLEEN** 

**THYMUS** 

**TONSIL** 

LYMPH NODE

**RED BONE MARROW** 

IT IS KNOWN, THAT THE PLASMA CELLS PRODUCE SPECIFIC ANTIBODIES. AFTER ENTRANCE OF AN ANTIGEN THE AMOUNT OF PLASMOCYTES IS ENLARGED. AT THE EXPENSE OF WHAT BLOOD CELLS THE

AMOUNT OF PLASMOCYTES IS ENLARGED?

**B-LYMPHOCYTES** 

**T-LYMPHOCYTES** 

**NEUTROPHILS** 

**EOSINOPHILS** 

**BASOPHILS** 

ON A SLIDE THE MEDULLA OF A LOBULE OF HEMOPOIETIC ORGAN IS STAINED LIGHTER AND CONTAINS EPITHELIAL BODIES. WHAT ORGAN POSESSES THESE MORPHOLOGICAL ATTRIBUTES?

**THYMUS** 

LYMPH NODE

**SPLEEN** 

**LIVER** 

**KIDNEY** 

IN A RED BONE MARROW DURING A POSTEMBRYONAL HEMOPOIESIS IN SOME CELLS A BASOPHILIA OF CYTOPLASM GRADUALLY DECREASES AND THE OXYPHILIA IS ENLARGED, THE NUCLEUS IS PUSHED OUT. NAME A KIND OF A HEMOPOIESIS, FOR WHICH SUCH MORPHOLOGICAL CHANGES ARE CHARACTERISTIC.

**ERYTHROPOIESIS** 

LYMPHOPOIESIS

**NEUTROPOIESIS** 

**EOSINOPHILOPOIESIS** 

**BASOPHILOPOIESIS** 

ON A SLIDE THE HEMOPOIETIC ORGAN IS RESEARCHED WHICH CONSISTS OF DIFFERENT LOBULES. IN EACH LOBULE CORTEX AND MEDULLA ARE PRESENT. WHAT ORGAN POSESSES THESE ATTRIBUTES?

**THYMUS** 

LYMPH NODE

**SPLEEN** 

**TONSILS** 

**APPENDIX** 

AT REPEATED HIT OF AN ANTIGENE IN AN ORGANISM THE ANTIBODIES ARE APPEARED. TO FUNCTION OF WHAT IMMUNOCOMPETENT CELLS IS THIS PHENOMENON CONNECTED?

LYMPHOCYTES OF MEMORY

**T-KILLERS** 

**T-SUPRESSORS** 

**MACROPHAGES** 

## **DENDRITIC CELLS**

THE WOMAN IN ONE MONTH AFTER PARTURITION COMPLAINS ON SMALL AMOUNT OF MILK. INSUFFICIENCY OF WHAT HORMONE DOES TAKE PLACE?

**PROLACTIN** 

**GLUCAGON** 

**ADRENOCORTICOTROPHIN** 

**SOMATOSTATIN** 

INSULIN

IT IS KNOWN, THAT ALDOSTERON ADJUSTS THE CONTENTS OF A SODIUM IN AN ORGANISM. WHAT CELLS OF ADRENAL GLAND PRODUCE THIS HORMONE?

**CELL OF ZONA GLOMERULOSA** 

**CELL OF A FASCICULAR ZONE** 

**EPINEPHROCYTES** 

**CELL OF ZONA RETICULARIS** 

**NOREPINEPHROCYTES** 

ON A SLIDE WITH FRENCH BEAN SHAPED ORGAN THE CORTEX AND MEDULLA ARE DETERMINED. CORTEX HAS SPHERICAL NODULES 0.5-1 MM IN DIAMETER, AND MEDULLA CONTAINS MEDULLARY CORDS. WHAT ORGAN IS IT? LYMP NODE

**THYMUS** 

**KIDNEY** 

ADRENAL GLAND

**SPLEEN** 

THE MICROSCOPIC SECTION THROUGH LYMPH NODE HAS MADE. ON A SLIDE THE EXPANSION OF PARACORTICAL ZONE IS OBSERVED. PROLIFERATION OF WHAT CELLS OF LYMPH NODE HAS CAUSED THIS PROCESS?

**T-LYMPHOCYTES** 

**MACROPHAGES** 

**B-LYMPHOCYTES** 

**PLASMOCYTES** 

**RETICULOCYTES** 

ON A SLIDE THE SPHERICAL AGGREGATIONS OF LYMPHOCYTES ARE REVEALED. IN THE MIDDLE OF THEM THERE IS A CENTRAL ARTERY. WHAT ORGAN IS RESEARCHED?

**SPLEEN** 

**KIDNEY** 

**THYMUS** 

**RED BONE MARROW** 

LYMPH NODE

IN THE PATIENT OF 40 YEARS OLD THE FAILURE FUNCTION OF ADRENAL CORTEX IS FOUND OUT, RESULTING IN DECREASE AMOUNT OF ALDOSTERON IN A BLOOD. FUNCTION OF WHAT ADRENAL CORTEX ZONA IS BROKEN? GLOMERULAR ZONA

**FASCICULAR ZONA** 

**ZONA RETICULARIS** 

SUDANOPHOBIC ZONA

X-ZONA

IN A PUNCTATE OF A RED BONE MARROW THE DECREASE AMOUNT OF MEGACARYOCYTES IS REVEALED. WHAT CHANGES OF A PERIPHERIC BLOOD ARE ACCOMPANIED BY THIS PHENOMENON?

**DECREASE AMOUNT OF THROMBOCYTES** 

**INOREASE AMOUNT O-F LEUCOCYTES** 

**INOREASE AMOUNT OF THROMBOCYTES** 

DECREASE AMOUNT OF GRANULOCYTES

**DECREASE AMOUNT OF LEUCOCYTES** 

TO THE MEDICAL STUDENT HAVE GIVEN SLIDES OF TWO SMEARS. ON ONE OF THEM ERYTHROCYTES ARE RECOGNIZED, ON THE ANOTHER BLOOD FORMING CELLS ON A DIFFERENT DEGREE OF MATURITY. WHAT SMEARS HAVE GIVEN?

**BLOOD AND RED BONE MARROW** 

BLOOD OF A FROG AND BLOOD OF THE HUMAN

**BLOOD AND LYMPH** 

**BLOOD AND SMEAR OF YELLOW BONE MARROW** 

SMEAR OF YELLOW AND RED BONE MARROW

MEDICAL STUDENT INVESTIGATES TWO TISSUE SPECIMENS. ON BOTH - ORGANS, WHICH HAVE LYMPHATIC NODULES. ON THE FIRST SLIDE FOLLICLES CONTAIN ECCENTRIC POSED ARTERIAL VESSEL, AND ON THE SECOND - FOLLICLES WITHOUT ARTERIES. NAME THESE ORGANS.

FIRST - SPLEEN, SECOND - LYMPH NODE

FIRST - RED BONE MARROW, SECOND - SPLEEN

FIRST - THYMUS, SECOND - SPLEEN

FIRST - LIVER, SECOND - LYMPH NODE

FIRST - LIVER, SECOND - SPLEEN

ON A SLIDE OF A RED BONE MARROW THE CLUMPS OF HUGE CELLS POSED IN CLOSE CONTACT WITH SINUSOIDAL CAPILLARIES ARE DETERMINED. NAME ELEMENTS OF A BLOOD, WHICH ARE FORMED OF THESE CELLS.

**PLATELETS** 

**ERYTHROCYTES** 

**LEUKOCYTES** 

**MONOCYTES** 

LYMPHOCYTES

AT INFECTIOUS DISEASES, INTOXICATIONS IN A THYMUS THE AMOUNT OF HASSAL'S CORPUSCLES IS ENLARGED, THE AREA OF LOBULAR MEDULLA EXTENDS. HOW DOES THE GIVEN CHANGES IN A THYMUS REFER TO AS?

ACCIDENTAL INVOLUTION

AGING INVOLUTION

THYMUS-LYMPHATIC STATUS

T-IMMUNODEFICIT

**B-IMMUNODEFICIT** 

THE ACROMEGALY WAS DIAGNOSED TO THE PATIENT WITH ENLARGED HEAD, FACE AND HANDS. HYPERFUNCTION OF WHAT CELLS OF A PITUITARY GLAND CAUSES THIS DISEASE?

**SOMATOTROPES** 

**THYROTROPES** 

**GONADOTROPES** 

**CHROMOPHOBES** 

**MAMMOTROPES** 

IN THE PUNCTATE OF A HEMOPOIETIC ORGAN THE MEGACARYOCYTES HAVE FOUND OUT. WHAT ORGAN IS IT? RED BONE MARROW

**SPLEEN** 

**THYMUS** 

LYMPH NODE

**TONSIL** 

A VITAL STAIN HAVE ENTERED IN AN AFFERENT VESSEL OF LYMPH NODE. IN WHAT CELLS OF LYMPH NODE IS IT POSSIBLE TO REVEAL PARTICLES OF A STAIN?

**MACROPHAGES** 

RETICULOEPITHELIAL

**B-LYMPHOCYTES** 

PLASMA CELLS

**T-LYMPHOCYTES** 

IN A RED BONE MARROW THE DEVELOPING BLOOD CELLS ARE POSED BY ISLANDS. SOME OF ISLANDS ARE CONNECTED TO MACROPHAGES. WHAT ELEMENTS OF A BLOOD DEVELOP IN THESE ISLANDS?

**FRYTHROCYTES** 

**BASOPHILIC GRANULOCYTES** 

PRECURSORS OF T- AND B-LYMPHOCYTES

**MONOCYTES** 

**THROMBOCYTES** 

AFTER A RESECTION OF A THYROID GLAND THE CRAMPS HAVE APPEARED. THE SIMPLIFICATION HAS COME AFTER INJECTION OF PREPARATIONS OF CA++. FUNCTION OF WHAT ENDOCRINE GLAND IS DISTURBED?

**PARATHYROID** 

**ADRENAL** 

**THYROID** 

PITUITARY GLAND

**EPIPHYSIS** 

AFTER AN ANTIGENIC STIMULATION IN MEDULLARY CORDS OF A LYMPH NODE REVEALED CELLS WITH INTENSIVELY BASOPHILIC CYTOPLASM, NUCLEUS WITH A CHROMATIN, WHICH IS POSED AS SPOKES OF A WHEEL, AND LIGHT SITE OF CYTOPLASM NEAR IT. WHAT CELLS ARE THEY?

**PLASMOCYTES** 

**MACROPHAGES** 

**FIBROBLASTS** 

**ADIPOCYTES** 

**BASOPHILS (MAST CELLS)** 

ON A SLIDE OF ENDOCRINE GLAND THE ROUND STRUCTURES OF THE DIFFERENT SIZES ARE VISIBLE, WHICH WALL IS FORMED BY ONE LAYER OF EPITHELIAL CELLS LOCATED ON A BASAL MEMBRANE. IN THE MIDDLE THEY CONTAIN HOMOGENEOUS EXTRACELLULAR MASS. WHAT GLAND IS IT?

**THYROID** 

POSTERIOR LOBE OF A PITUITARY GLAND

ADRENAL CORTEX

PARATHYROID

ANTERIOR LOBE OF A PITUITARY GLAND

AT THE PATIENT A HYPERFUNCTION OF A THYROID GLAND HAVE REVEALED. WHAT IS THE SHAPE OF THYROCYTES AT

THIS STATE?

COLUMNAR

**POLIGONAL** 

FLAT

SPINDLE-SHAPED

**CUBOIDAL** 

AT THE CHILD INHERENT IMMUNODIFICIT IS REVEALED. CELLULAR IMMUNITY IS NOT FORMED, THAT CAUSES OFTEN VIRUS INFECTIONS. WHAT ORGAN DOES NOT WORK PROPERLY AT THIS CASE?

**THYMUS** 

**RED BONE MARROW** 

LYMPH NODE

**SPLEEN** 

PALATINE TONSILS

ON A SLIDE OF A RED BONE MARROW AMONG CELLS OF MYELOID SERIES AND ADIPOCYTES THERE ARE CELLS OF STELLATE FORM WITH OXYPHILIC CYTOPLASM, WHICH CONTACT BY THE PROCESSES. WHAT ARE THESE CELLS?

**RETICULAR** 

**FIBROBLASTS** 

**MACROPHAGES** 

OSTEOCYTES

**DENDRITIC** 

ON A SLIDE OF LYMPH NODE IN MEDULLARY CORDS THE INCREASED PLASMOCYTOGENESIS IS REVEALED.

ANTIGEN-DEPENDING STIMULATION OF WHAT IMMUNOCOMPETENT CELLS HAS RESULTED IN THEIR FORMATION?

**B-LYMPHOCYTES** 

**T-LYMPHOCYTES** 

**MACROPHAGES** 

**DENDRITIC** 

**INTEGRATING CELLS** 

ENDOCRINE GLAND IS MADE OF EPITHELIAL CORDS, WHICH CONSIST OF ACIDOPHILIC, BASOPHILIC AND CHROMOPHOBIC CELLS. WHAT ORGAN IS IT?

**ADENOHYPOPHISIS** 

**EPIPHYSIS** 

**ADRENAL** 

**NEUROHYPOPHYSIS** 

THYROID GLAND

ON A TISSUE SPECIMEN OF A PALATINE TONSIL THE CRYPTS ARE VISIBLE, WHICH EPITHELIUM IS INFILTRATED BY LEUKOCYTES. WHAT EPITHELIUM LINES THIS ORGAN?

STRATIFIED NONKERATINIZED

SIMPLE CUBOIDAL

SIMPLE COLUMNAR

STRATIFIED KERATINIZED

**PSEUDOSTRATIFIED CILIATED** 

THE EXPERIMENTAL ANIMAL PRODUCES A PLENTY OF URINE (POLYURIA) AND IS THIRSTY (POLYDIPSIA). THE URINE DOES NOT CONTAIN GLYCOGEN. FUNCTION OF WHAT STRUCTURES IS DISTURBED?

**NEUROSECRETORY CELLS OF A HYPOTHALAMUS** 

THYROCYTES OF A THYROID GLAND

**PARATHYROCYTES** 

GLOMERULAR ZONE OF A ADRENAL

ADRENAL MEDULLA

THE PARENCHYMAL ORGAN HAS CORTEX AND MEDULLA. CORTEX IS FORMED BY EPITHELIAL CORDS, BETWEEN WHICH PASS CAPILLARIES; CORDS FORM THREE ZONES. THE MEDULLA CONTAINS CHROMAFFIN CELLS AND SINUSES.

WHAT ORGAN IS IT?

**ADRENAL** 

**THYMUS** 

**KIDNEY** 

LYMPH NODE

**OVARY** 

AT THE PATIENT THE CONTENTS OF Ca++ IN A BLOOD HAS SHARPLY DECREASED. WHAT HORMONE CAN CALL THIS EFFECT?

**PARATHORMONE** 

**ALDOSTERON** 

**THYROCALCITONIN** 

**SOMATOTROPIC** 

**VASOPRESSIN** 

IN ENDOCRINE CLINIC THERE IS A BOY 9 YEARS, WHICH EXTREMETIES HAD SOME TIMES FRACTURED. IT IS CONNECTED TO FRAGILITY OF BONES. FUNCTION OF WHAT ENDOCRINE GLAND IS BROKEN?

PARATHYROID

**THYROID** 

**EPIPHYSIS** 

**ADRENAL** 

**THYMUS** 

THE RATHKE POCKET ARISES FROM AN ECTODERMAL ORAL EPITHELIUM AND IS MOVED TO THE BASIS OF THE FUTURE BRAIN. WHAT DEVELOPS FROM GIVEN GERM?

**ADENOHYPOPHYSIS** 

**NEUROHYPOPHYSIS** 

MEDIAL EMINENCE

ANTERIOR HYPOTHALAMUS

**INFUNDIBULUM** 

AT INFECTIOUS DISEASES, INTOXICATIONS IN A THYMUS LOBULES THE AMOUNT OF RETICULOEPITHELIAL CELLS, HASSAL CORPUSCLES INCREASES, THE AREA OF MEDULLA BECOMES WIDER. HOW DOES THESE CHANGES IN A THYMUS REFER TO AS?

ACCIDENTAL AN INVOLUTION

**B-IMMUNODEFICIT** 

THYMICO-LYMPHATIC STATUS

AGE INVOLUTION

T-IMMUNODEFICIT

CHILD HAS INHERENT IMMUNODEFICIT. CELLULAR IMMUNITY IS DECREASED, THAT PROVOKES OFTEN VIRUS INFECTIONS. BY INFRINGEMENTS IN WHAT ORGAN, MOST LIKELY, IT IS CAUSED?

**THYMUS** 

**RED BONE MARROW** 

LYMPH NODE

**SPLEEN** 

PALATINE TONSILS

IN FOLLICULAR WALLS AND PARAFOLLICULARLY IN THE THYROID GLAND SETTLE DOWN LARGE ENDOCRINOCYTES WITH SECRETORY GRANULES. WHAT ARE THESE CELLS?

**CALCITONINOCYTES** 

**THYROCYTES** 

**PARATHYROCYTES** 

**PINEALOCYTES** 

**PITUICYTES** 

AT THE PATIENT WITH INCREASED IN SIZE SPLEEN THE DECREASE AMOUNT OF ERYTHROCYTES OF A PERIPHERIC BLOOD IS REVEALED. THE RISING OF WHAT SPLEENIC CELLS FUNCTION IS OBSERVED THUS?

**MACROPHAGES** 

INTERDIGITATING CELLS

LYMPHOCYTES

**DENDRITIC CELLS** 

**PLASMOCYTES** 

GIVING A DESCRIPTION OF A STRESS, STUDENT WAS MISTAKEN, WHEN HAD SAID, THAT SYNTHESIS OF GLUCOCORTICOIDS OF ADRENAL CORTEX IS STIMULATED BY HYPOPHYSEAL HORMONES. WHAT ANSWER IS MORE CORRECT?

**ACTH** 

**SOMATOTROPIN** 

**GONADOTROPIC HORMONES** 

**PROLACTIN** 

**THYROTROPIN** 

UNDER SOME UNFAVOURABLE CONDITIONS THYMUS UNDERGOES RECONSTRUCTION, IS FOLLOWED BY DESTRUCTION OF THYMOCYTES, MOVING OF THEM TO PERIPHERAL ORGANS AND PROLIFERATION OF EPITHELIOCYTES. HOW IS THIS PHENOMENON CALLED?

**ACCIDENTAL INVOLUTION** 

AGING INVOLUTION

**HYPOTROPHY** 

**DYSTROPHY** 

# **ATROPHY**

DURING MICROSCOPIC EXAMINATION OF A THYMUS ARE REVEALED DECREASE OF THE THYMUS PARENCHYMAL ELEMENTS, INCREASE OF ADIPOSE AND CONNECTIVE TISSUES AND AMOUNT OF HASSAL CORPUSCLES. HOW IS THIS PHENOMENON CALLED?

AGING INVOLUTION

ACCIDENTAL INVOLUTION

**HYPOTROPHY** 

**DYSTROPHY** 

**ATROPHY** 

A NEWBORN HAS CONGENITAL ATROPHY OF THYMUS. WHAT IMMUNE CELLS ARE DISTURBED MORE THAN OTHERS?

**T-LYMPHOCYTES** 

**B-LYMPHOCYTES** 

**MACROPHAGES** 

ANTIGEN-PRESENTING CELLS

**B-CELLS MEMORY** 

IN A WOMAN WITH DEFICIENCY OF SEX HORMONES THE AMOUNT OF FOLLICLESTIMULATING HORMONE IS INCREASED. WHAT HYPOPHYSEAL CELLS WILL BE CHANGED AT THAT?

**GONADOTROPES** 

**THYROTROPES** 

**ADRENOCORTICOTROPES** 

**SOMATOTROPES** 

**LACTOTROPES** 

A PATIENT WITH HYPOTHYROIDISM HAS DEFICIENCY OF THYROID HORMONES. WHAT CELLS OF ADENOHYPOPHYSIS

WILL BE CHANGED?

**THYROTROPES** 

**GONADOTROPES** 

**ADRENOCORTICOTROPES** 

**SOMATOTROPES** 

**LACTOTROPES** 

LABORATORY ANIMAL HAS PREMATURE PUBERTY AFTER ENDOCRINE GLAND ECTOMY. DURING ECTOMY OF WHICH GLAND MAY IT BE HAPPENED?

**PINEAL** 

HYPOPHYSIS CEREBRI

**ADRENAL** 

**THYROID** 

**PARATHYROID** 

IN THE MICROSCOPIC SLIDE OF ADRENAL THE SMALL POLYGONAL CELLS, FORMING ROUND CLUSTERS, CONTAIN SMALL AMOUNT OF LIPID INCLUSIONS ARE VISIBLE. THEY PRODUCE ALDOSTERONE. WHAT PART OF ADRENAL IS IT?

**GLOMERULOSA** 

**FASCICULATA** 

**SUDANOPHOBIC** 

**RETICULARIS** 

**MEDULLA** 

MICROSCOPIC SLIDE OF ADRENAL HAS ZONE OF BIG CUBOIDAL CELLS, FORMING CORDS AND CONTAINING BIG AMOUNT OF LIPID INCLUSIONS. THEY PRODUCE GLUCOCORTICOIDS. WHAT PART OF ADRENAL IS IT?

**ZONA FASCICULATA** 

**ZONA GLOMERULOSA** 

**INTERMEDIATE ZONE** 

ZONA RETICULARIS

**MEDULLA** 

A MAN HAS A BRAIN TUMOR. WHAT ORGAN IS THE MOST RESPONSIBLE FOR FORMATION OF IMMUNITY AGAINST

TUMOR?

**THYMUS** 

**RED BONE MARROW** 

LYMPH NODE

**SPLEEN** 

LYMPH FOLLICLES OF INTESTINE

HYPOPHYSIS DEVELOPS FROM TWO EMBRYONIC SOURCES - EPITHELIAL AND NEURAL. WHAT IS ITS EPITHELIAL PART

**EMBRYONIC SOURCE?** 

**EPITHELIUM OF STOMATODAEUM** 

**EPITHELIUM OF PROCTODAEUM** 

**EPITHELIUM OF A PRIMITIVE GUT** 

COELOMIC EPITHELIUM

**EPITHELIUM OF NEURAL TUBE** 

A 15 YEARS PATIENT HAS ENLARGED PALATINE TONSILS. WHAT STRUCTURES OF THESE ORGANS PLAY A ROLE IN IMMUNE DEFENSE OF AN ORGANISM AGAINST STREPTOCOCCUS?

LYMPHATIC NODULES

LOOSE CONNECTIVE TISSUE

STRITIFIED KERATINIZED EPITHELIUM

**CRYPTS** 

STRATIFIED NONKERATINIZED EPITHELIUM

A CHILD HAS DISTURBANCE OF ENAMEL AND DENTINE FORMATION BECAUSE OF DECREASED BLOOD CALCIUM IONS CONCENTRATION. DEFICIENCY OF WHAT HORMONE CALLS SUCH PATHOLOGY?

**PARATHORMONE** 

**TRIIODOTHYRONINE** 

**THYROXINE** 

**THYROCALCITONIN** 

**SOMATOTROPIN** 

A PATIENT WAS EXPOSED TO IONIZATION. EXAMINATION OF HIM REVEALS DISTURBANCE OF A SPLEEN WHITE PULP. WHAT SPLEEN CELLS ARE PATHOLOGICALLY CHANGED?

LYMPHOCYTES

**TISSUE BASOPHILS** 

**BASOPHILS** 

**MONOCYTES** 

**NEUTROPHILS** 

A HEIGHT OF 12 YEARS CHILD IS 1M 80 CM. PATHOLOGY OF WHICH HORMONE TAKES PLACE?

**SOMATOTROPINE** 

**THYROXINE** 

**INSULIN** 

**GONADOTROPIC** 

**THYROTROPIC** 

EXAMINATION OF A WOMAN REVEALS AN INCREASE IN METABOLIC PROCESSES. ABNORMAL HIGH RATE OF WHAT HORMONES CAN CAUSE THIS PATHOLOGY?

TRIIODOTHYRONINE

**ALDOSTERONE** 

**THYROCALCITONINE** 

**SOMATOSTATIN** 

**GLUCAGON** 

MICROSCOPIC SLIDE OF ONE ENDOCRINE GLAND SHOWS ROUND STRUCTURES ARE OF DIFFERENT SIZES, THEIR WALL IF FORMED BY ONE LAYER OF EPITHELIUM, RESTING ON BASEMENT MEMBRANE. INSIDE THERE IS HOMOGENOUS NONCELLULAR MASS.WHAT GLAND IS IT?

**THYROID** 

**PARATHYROID** 

PARS DISTALIS OF HYPOPHYSIS

**ADRENAL** 

PARS NERVOSA OF HYPOPHYSIS

A PATIENT HAS DIABETES INSIPIDUS. DEFICIENCY OF WHAT HYPOPHYSIAL HORMONE TAKES PLACE?

**ANTIDIURETIC** 

**THYROTROPIN** 

FOLLICLE-STIMULATING

**ADRENOCORTICOTROPIC** 

LUTEINIZING

IN TIME OF SURGERY ONE OF ENDOCRINE GLAND WAS REMOVED BY MISTAKE. IT RESULTS IN DECREASE OF BLOOD

CALCIUM LEVEL. WHICH GLAND IS IT?

**PARATHYROID** 

**ADRENAL** 

**HYPOPHYSIS** 

**THYROID** 

**PINEAL** 

IN A PATIENT IS INSUFFICIENTLY DEVELOPED ADRENAL. WHAT EMBRYONIC PROCESS WAS DISTURBED?

DIFFERENTIATION OF NEURAL CREST

FORMATION OF FIRST BRANCHIAN POUCH

**DIFFERENTIATION OF SOMITES** 

FORMATION OF BODY FLEXION

**DEVELOPMENT OF GUT** 

THYROLIBERIN WAS INJECTED TO A PATIENT. WHICH OF HYPOPHYSIAL HORMONES WILL BE PRODUCED IN INCREASED

AMOUNT?

**THYROTROPIC** 

**MELANOTROPIC** 

**SOMATOTROPIC** 

LUTEINIZING

**ADRENOCORTICOTROPIC** 

A 46 YEARS PATIENT WAS HOSPITALIZED IN IMMUNOLOGIC CLINIC WITH PATHOLOGY OF GRANULOCYTOPOIESIS AND THROMBOCYTOPOIESIS. WHICH ORGAN HAS PATHOLOGY?

**RED BONE MARROW** 

LYMPH NODE

PALATINE TONSIL

**SPLEEN** 

**THYMUS** 

A 2 YEARS CHILD HAS MUSCULAR CONVULSIONS BECAUSE OF LOW LEVEL OF BLOOD CALCIUM CONCENTRATION.

WHICH ORGAN HAS PATHOLOGY?

PARATHYROID GLAND

**CORTEX OF ADRENAL** 

PINEAL GLAND

**THYMUS** 

**HYPOPHYSIS** 

USE OF THE ORAL CONTRACEPTIVES WITH SEX HORMONES INHIBITS THE HYPOPHYSEAL HORMONES PRODUCTION.

WHAT EXACTLY HORMONES ARE INHIBITED?

**FOLLICLE-STIMULATING** 

**THYROTROPIC** 

**OXYTOCIN** 

**SOMATOTROPIN** 

### **VASOPRESSIN**

A CHILD WITH ACUTE RESPIRATORY INFLAMMATION HAS ENLARGED NECK LYMPH NODES WITH INCREASE OF PLASMA CELLS. WHAT PART OF LYMPH NODE CONTAINS A LOT OF PLASMA CELLS?

**MEDULLARY CORDS** 

**CORTICAL SINUS** 

**GERMINAL CENTER** 

CORTEX

CONNECTIVE TISSUE SEPTA

A 50-YEARS-OLD WOMAN COMPLAINS OF LOSS OF APPETITE, DECREASED BODY WEIGHT, FATIGUE DURING BLOOD TEST EXAMINATION AN INCREASED GLUCOSE BLOOD LEVEL WAS REVEALED. PATHOLOGY OF WHICH CELLS DOES TAKE PLACE?

**B-CELLS** 

**PANCREOCYTES** 

LIPOTROCYTES

**THYROCYTES** 

A-CELLS

AT AN ADENOMA OF ANTERIOR LOBE OF A PITUITARY GLAND THE DISTURBANCE OF A MENSTRUAL CYCLE IS OBSERVED. WHAT STRUCTURES WILL BE FOUND IN OVARIES AT THAT CASE?

ONLY PRIMORDIAL AND ATRETIC FOLLICLES

**ONLY PRIMORDIAL FOLLICLES** 

ALL STAGES OF FOLLICLES DEVELOPMENT

ABSENCE OF ATRETIC FOLLICLES

**ONLY CORPORA LUTEA** 

THE INHERENT APLASIA OF THYMUS IS FOUND OUT IN THE CHILD. LEVEL OF WHAT HORMONE IS REDUCED IN A

BLOOD?

**TIMOSIN** 

**SOMATOTROPIN** 

**THYROTROPIC** 

**EPINEPHRINE** 

**CALCITONIN** 

SICK 40 YEARS HAS ADDRESSED WITH THE COMPLAINTS OF A PLENTY OF PRODUCED URINE AND POLYDIPSIA. ON THE COMPUTER TOMOGRAPHY OF A BRAIN MAY BE FOUND OUT THE PATHOLOGY OF:

SUPRAOPTIC NUCLEUS OF A HYPOTHALAMUS

POSTERIOR PART OF A HYPOTHALAMUS

**CEREBELLUM** 

**ADENOHYPOPHYSIS** 

ARCUATE NUCLEI OF MIDDLE HYPOTHALAMUS

ON A TISSUE SPECIMEN OF A THYROID GLAND THYROCYTES ARE BIG, COLUMNAR. IT SPEAKS ABOUT:

AMPLIFIED STIMULATION BY THYROTROPIC HORMONE OF A PITUITARY BODY

DESREASE OF A DEGREE OF ACTIVATION OF A THYROID GLAND

PRESENCE OF INTERFOLLICULAR ISLANDS

INFLUENCE OF CALCITONINUM

INFLUENCE OF PARATHHORMONE

ON A SLIDE THE ACCUMULATION OF A GLYCOGEN IN THE LIVER CELLS IS OBSERVED. WHAT HORMONES PROVIDE TRANSFORMATION OF PROTEINS INTO CARBOHYDRATES?

**GLUCOCORTICOIDS** 

**MINERALOCORTICOIDS** 

**ESTROGENS** 

**NORADRENALIN** 

**INSULIN** 

FROM WHAT EMBRYONIC SOURCE THE PARS INTERMEDIA OF A PITUITARY GLAND DEVELOPS?
EPITHELIUM OF ORAL CAVITY
NEUROECTODERM
EPITHELIUM OF A COELOM
EPITHELIUM OF BRANCHIAL POUCH
ENDODERM

WHAT IS LOCATED IN A POSTERIOR LOBE OF A PITUITARY GLAND?
ENDS OF AXONS OF NEUROSECRETORY CELLS OF A HYPOTHALAMUS (HERRING BODIES)
PACINI CORPUSCLES
ACIDOPHILIC ENDOCRINOCYTES
BASOPHILIC ENDOCRINOCYTES
CHROMOPHILIC ENDOCRINOCYTES

WHAT HORMONES ARE STORAGED IN POSTERIOR LOBE OF A PITUITARY BODY?
OXYTOCIN, VASOPRESSIN
MELANOTROPIC
LIPOTROPIC
MAMMOTROPIC
ACTH

WHERE ARE HORMONES OF A POSTERIOR LOBE OF A PITUITARY GLAND FORMED? IN SUPRAOPTIC AND PARAVENTRICULAR NUCLEI IN ARCUATE NUCLEUS IN VENTROMEDIAL NUCLEUS IN DORSOMEDIAL NUCLEUS IN A POSTERIOR LOBE OF HYPOPHYSIS CEREBRI

WHAT FUNCTIONS DOES EPIPHYSIS CARRY OUT?
REGULATION OF RHYTHMIC OR CYCLIC PROCESSES
RISING THE BASIC EXCHANGE OF METABOLITES
FASTNESS TO THE STRESSFUL FACTORS
RISING THE SECRETION OF ENDOCRINE GLANDS
INNERVATION

THE HYPOPHYSIS INDEPENDENT ORGANS ARE:
PARATHYROID GLAND
ADRENAL MEDULLA
THYROID GLAND
TESTIS
OVARY

WHAT HORMONES ARE PRODUCED BY PARAFOLLICULAR CELLS OF A THYROID GLAND? CALCITONIN, SOMATOSTATIN MONOIODOTHYRONIN, DIIODOTHYRONIN THYROGLOBULIN THYROXINE, TRIIODOTHYRONIN SOMATOSTATIN, THYROXINE

WHAT HORMONES ARE PRODUCED BY A ZONA GLOMERULOSA OF ADRENAL CORTEX? ALDOSTERON GLUCOCORTICOIDS ANDROGENS, ESTROGENS NORADRENALIN, EPINEPHRINE ALDOSTERONN, ANDROGENS

WHAT HORMONES ARE PRODUCED BY A ZONA FASCICULARIS OF ADRENAL CORTEX?

GLUCOCORTICOIDS
ALDOSTERONUM
ANDROGENS, EATROGENS
NORADRENALIN, EPINEPHRINE
ESTROGENS, ADRENALIN

WHAT IS THE EMBRYONIC SOURCE OF ADRENAL MEDULLA?
NEUROBLASTS OF NERVOUS CRESTS
COELOMIC EPITHELIUM
EPITHELIUM OF A PHARYNX
MESENCHYME
ENDODERM

WHERE DO THE CENTERS OF A HEMOPOIESIS IN BONES SETTLE DOWN? IS CLOSER TO AN ENDOSTEUM IN AN OSTEON IN GENERAL PLATES IN A PERIOSTEUM AROUND VESSELS IN THE OSTEONS

THE PRECURSORS OF T - LYMPHOCYTES ENTER THE THYMUS FROM:
RED BONE MARROW
SPLEEN RED PULP
LYMPH NODE
TONSIL
SPLEEN WHITE PULP

LYMPH NODES DEVELOP FROM:
MESENCHYME
ENDODERM
ECTODERM
INTESTINAL ENDODERM
VISCERAL MESODERM

SUBCAPSULAR SINUS OF LYMPH NODE IS LOCATED IN:
BETWEEN CAPSULE AND LYMPH FOLLICLE
BETWEEN FOLLICLES
BETWEEN MEDULLARY CORDS
IN HILUS OF NODE
IN CONNECTIVE TISSUE CAPSULE

WHAT FORMS A WHITE PULP OF A SPLEEN?
LYMPHATIC NODULES
CLUMP OF MONOCYTES
CLUMP OF BASOPHILS
CLUMP OF NEUTROPHILIC LEUCOCYTES
DEAD LEUKOCYTES

WHAT ORGAN OF IMMUNE SYSTEM CONTAINS PENICILLAR ARTERIOLES?
SPLEEN
THYMUS
RED BONE MARROW
TONSIL
LYMPH NODE

WHAT ZONES ARE FOUND IN LYMPHATIC NODULES OF A SPLEEN? GERMINAL CENTER, MARGINAL ZONE REGIONAL, CENTER OF DUPLICATION MANTLE REGIONAL
PERIARTERIAL, REGIONAL, MANTLE
SUBCAPSULAR, CORTICAL, MEDULLAR SINUSES

DURING DIPHTERIA A FIBRINOUS AXUDATE MAY BE FORMED ON THE TRUE VOCAL CORDS. WHAT TYPE OF

**EPITHELIUM LINES TRUE VOCAL CORDS?** 

STRATIFIED SQUAMOUS NONKERATINIZED

**PSEUDOSTRATIFIED CILIATED** 

STRATIFIED SQUAMOUS KERATINIZED

SIMPLE SQUAMOUS

SIMPLE CUBOIDAL

THE PATIENT COMPLAIN OF DRYNESS IN A NOSE. WALL OF A NASAL CAVITY REVEALS INSUFFICIENCY OF FUNCTION OF MUCOUS GLANDS. IN WHAT LAYER OF A MUCOSA OF A NASAL CAVITY THESE GLANDS ARE LOCALIZED?

LAMINA PROPRIA OF A MUCOSA

**IN A SUBMUCOSA** 

**EPITHELIAL PLATE** 

MUSCULAR PLATE

FIBRO-CARTILAGE PLATE

DURING BREATHING SOME PARTICLES OF DUST MAY BE INHALED. IN WHAT CELLS OF LUNG IT IS POSSIBLE TO FIND

**OUT PARTICLES OF DUST?** 

**ALVEOLAR MACROPHAGES** 

PERICYTES OF CAPILLARIES

RESPIRATORY EPITHELIOCYTES

SECRETORY EPITHELIOCYTES

**ENDOTHELIOCYTES OF CAPILLARIES** 

ON AN ELECTRON MICROPHOTOGRAPH IN THE MUCOSAL EPITHELIUM A NERVE CELL IS REVEALED. PERIPHERAL

PROCESS OF A CELL HAS THICKENING, FROM WHICH ARISE 10-12 CILIA. WHAT CELL IS IN THE SLIDE?

**OLFACTORY NEURONE** 

PSEUDOUNIPOLAR NEURON OF NERVE GANGLION

SENSORY CELL OF A TASTE BUD

**ROD VISUAL CELL** 

**CONE VISUAL CELL** 

THE HYPEREMIA AND INCREASED SYNTHESIS OF MUCUS IN A NASAL CAVITY IS FOUND OUT IN THE PATIENT WITH AN ACUTE RHINITIS. ACTIVITY OF WHAT CELLS OF AN EPITHELIUM OF A NASAL MUCOSA IS INCREASED?

**GOBLET** 

**ENDOCRINE** 

**CELL WITH MICROVILLI** 

BASAL

**CILIATED** 

LUNG ALVEOLI CONTAIN CELLS, THROUGH WHICH THE GAS EXCHANGE IS CARRIED OUT; THEY ARE INCLUDED INTO STRUCTURE OF BLOOD-AIR BARRIER. WHAT ARE THESE CELLS?

ALVEOLAR CELL TYPE I

**ALVEOLAR MACROPHAGES** 

**CLARA CELLS** 

ALVEOLAR CELL TYPE II

WITH MICROVILLI

ON AN ELECTRON MICROPHOTOGRAPH THE OPENED VESICLES ARE SUBMITTED, LINED BY ONE-ROW OF EPITHELIUM WITH RESPIRATORY AND SECRETORY CELLS. HOW IS THIS STRUCTURE CALLED?

**ALVEOLUS** 

BRONCHIOLE

**ACINUS** 

ALVEOLAR DUCT

### **TERMINAL BRONCHIOLE**

IN EPITHELIUM OF CONDUCTIVE PORTION OF RESPIRATORY SYSTEM THE CELLS WITH WELL EXPRESSED ORGANELLES OF SYNTHESIS ARE DETERMINED. WHAT ARE THESE CELLS?

**CLARA CELLS** 

**ENDOCRINE** 

**GOBLET** 

PNEUMOCYTE II

**STEM** 

AT PREMATURE CHILDREN THE SET OF SYMPTOMS OF RESPIRATORY FAILURE DEVELOPS. UNSUFFICIENT AMOUNT OF WHAT COMPONENT OF BLOOD-AIR BARRIER GIVES THIS PATHOLOGY?

**SURFACTANT** 

BASAL MEMBRANE OF AN ENDOTHELIUM

**ENDOTHELIUM OF CAPILLARIES** 

**BASAL MEMBRANE OF PNEUMOCYTES** 

**ALVEOLOCYTES** 

AT THE PATIENT WITH AN ACUTE RHINITIS THE HYPEREMIA AND INCREASED MUCOPOIESIS IN A NASAL CAVITY IS REVEALED. ACTIVITY OF WHAT CELLS OF AN EPITHELIUM OF A NASAL MUCOSA IS INCREASED?

**GOBLET** 

WITH VILLI

**CILIATED** 

**BASAL** 

**ENDOCRINE** 

IT IS KNOWN, THAT THE IMPORTANT COMPONENT OF BLOOD-AIR BARRIER IS SURFACTANT, WHICH PREVENTS COLLAPS OF ALVEOLUSES DURING AN EXHALATION. WHAT CELLS OF ALVEOLUSES SYNTHESIZE PHOSPHOLIPIDS, PARTICIPATING IN CREATION OF THIS COMPLEX?

TYPE II PNEUMOCYTES

WITH BRASH BORDER

TYPE I PNEUMOCYTES

**ALVEOLAR MACROPHAGES** 

**ENDOTHELIUM OF CAPILLARIES** 

THROUGH A BRONCHOSCOPE OF A CHILD HAVE REMOVED INHALED BUTTON FROM THE RIGHT PRIMARY BRONCHUS. WHAT EPITHELIUM OF A BRONCHUS IS DAMAGED BY FOREIGN SUBJECT?

PSEUDOSTRATIFIED CILIATED

STRATIFIED KERATINIZED

SIMPLE COLUMNAR

**TRANSITIONAL** 

SIMPLE SQUAMOUS

ONE OF THE INFLAMED TRACHEA SYMPTOMS IS COUGH ACCOMPANIED BY EXPELLING OF BIG AMOUNT OF MUCUS. WHAT TRACHEA EPITHELIUM CELLS ARE RESPONSIBLE FOR THE MUCUS SYNTHESIS?

**GOBLET** 

**ENDOCRINE** 

**BASAL** 

**CILIATED** 

**COLUMNAR CILIATED** 

LUNG OF PREMATURE INFANT IS PRESENTED ON ELECTROPHOTOGRAPH OF BIOPSY MATERIAL. COLLAPSE OF THE ALVEOLAR WALL CAUSED BY THE DEFICIENCY OF SURFACTANT WAS REVEALED. DYSFUNCTION OF WHAT CELLS OF THE ALVEOLAR WALL CAUSED IT?

TYPE II PNEUMOCYTES

ALVEOLAR MACROPHAGE

**CLARA-CELLS** 

**FIBROBLASTS** 

## TYPE I PNEUMOCYTES

PATIENT HAS LUNG DISEASE WITH THE PROMINENT PATHOLOGY PROCESS IN BRONCHI TREE. AT THE SLIDE OF THESE BRONCHI IS REVEALED PSEUDOSTRATIFIED CILIATED EPITHELIUM, LAMINA PROPRIA

WITH GLANDS, ISLETS OF HYALINE CARTILAGE. WHAT TYPE OF BRONCHI IS DAMAGED?

**SECONDARY BRONCHUS** 

**ALVEOLAR BRONCHIOLE** 

PRIMARY BRONCHUS

**TERMINAL BRONCHIOLE** 

**TRACHEA** 

CHILD 5 YEARS OLD HAS PNEUMONIA (LUNGS INFLAMMATION). DYSFUNCTION OF WHAT LINING EPITHELIUM ORGANELLE MAY BE DISTURBED FIRST OF ALL?

CILIA

LYSOSOME

**MICROVILLI** 

**ENDOPLASMIC RETICULUM** 

**MITOCHONDRIA** 

THE TRACHEAL EPITHELIUM OF SMOKING PERSON UNDERGOES METAPLASIA - CHANGES INTO STRATIFIED NONKERATINISED EPITHELIUM. WHAT TYPE OF EPITHELIUM IS CHANGED?

**PSEUDOSTRATIFIED CILIATED** 

SIMPLE COLUMNAR

STRATIFIED KERATINISED

SIMPLE CUBOIDAL

EPITHELIUM WITH BRASH BORDER

IN CASE OF ASTHMA THERE IS AN INSTABILITY AND CONSTRUCTION OF THE SMOOTH MUSCLES IN CONDUCTING PORTION OF THE RESPIRATORY SYSTEM, LEADING TO THE AIRWAY NARROWING. WHAT TYPE OF BRONCHI HAS MUSCLES AND HAS NO CARTILAGE IN ITS WALL?

TERTIARY BRONCHUS SECONDARY BRONCHUS PRIMARY BRONCHUS ALVEOLAR DUCT ALVEOLAR SAC

IN NEWBORN WAS DIAGNOSED "SYNDROM OF RESPIRATORY FRUSTRATION" - THE VENTILATION OF ALVEOLI IS DISTURBED BECAUSE OF UNSUFFICIENT DEVELOPMENT OF SURFACTANT. WHAT CELLS PRODUCE SURFACTANT? SECRETORY ALVEOLOCYTES

RESPIRATORY ALVEOLOCYTES

INTERALVEOLAR SEPTA

**GOBLET CELLS** 

**ENDOCRINOCYTES** 

A NEWBORN DIDN'T TAKE HIS FIRST BREATH. AUTOPSY REVEALED THAT IN SPITE OF UNOBSTRUCTED RESPIRATORY TRACTS THE BABY'S LUNGS DIDN'T EXPANDED. WHAT MIGHT BE THE CAUSE OF IT?

SURFACTANT ABSENCE

**BRONCHOSTENOSIS** 

ALVEOLE ENLARGEMENT

**BRONCHI RUPTURE** 

APICAL CAP OF LUNG

A PATIENT WITH AN ACUTE RHINITIS HAS HYPEREMIA AND EXCESSIVE MUCUS FORMATION IN NASAL CAVITY. WHAT EPITHELIAL CELLS OF MUCOUS MEMBRANE HAVE THE INTENSIFIED ACTIVITY?

**GOBLET CELLS** 

**CILIATED CELLS** 

MICROVILLOUS CELLS

**BASAL CELLS** 

# **ENDOCRINE CELLS**

PREMATURE INFANTS HAVE SYNDROM OF RESPIRATORY FAILURE. FAILURE OF WHAT AIROHEMATIC BARRIER COMPONENT UNDERLIES THIS PATHOLOGY?

**SURFACTANT** 

**CAPILLARY ENDOTHELIUM** 

BASAL MEMBRANE OF ENDOTHELIUM

**BASAL MEMBRANE OF ALVEOLOCYTES** 

**ALVEOLOCYTES** 

ELECTRONIC MICROPHOTOGRAPHY OF PULMONARY ALVEOLE'S WALL PRESENTS A BIG CELL. ITS CYTOPLASM HAS A LOT OF MITOCHONDRIA, DEVELOPED GOLGI APPARATUS, OSMIOPHIL LAMELLATED CORPUSCLES. WHAT IS THE MAIN FUNCTION OF THIS CELL?

IT PRODUCES SURFACTANT

IT IS A COMPONENT OF BLOOD-AIR BARRIER

IT WARMS THE AIR

IT ABSORBS MICROORGANISMS

IT PURIFIES THE AIR

HOLLOW ORGAN IS REPRESENTED ON THE SLIDE. IT'S MUCOUS MEMBRANE IS LINED WITH PSEUDOSTRATIFIED OF CILIATED EPITHELIUM, WHICH PASSES INTO A SIMPLE ONE. MUSCULARIS MUCOSAE IS WELL DEVELOPED IN RELATION TO THE THICKNESS OF THE ENTIRE WALL. CARTILAGE AND GLANDS ARE ABSENT. WHICH ORGAN IS REPRESENTED IN THE SLIDE?

**SMALL BRONCHUS** 

LARYNX

**TRACHEA** 

MIDDLE BRONCHUS

**BLADDER** 

DURING BREATHING SOME PARTICLES OF DUST MAY BE INHALED. IN WHAT CELLS OF LUNG IT IS POSSIBLE TO FIND

**OUT PARTICLES OF DUST?** 

**ALVEOLAR MACROPHAGES** 

PERICYTES OF CAPILLARIES

RESPIRATORY EPITHELIOCYTES

SECRETORY EPITHELIOCYTES

**ENDOTHELIOCYTES OF CAPILLARIES** 

THE DESTRUCTION OF THE CILIATED EPITHELIAL CELLS OF THE BRONCHI OCCURRED IN A WORKER OF CHEMICAL PRODUCTION AFTER INHALING OF CAUSTIC VAPOUR. WHICH CELLS WILL PARTICIPATE IN REGENERATION OF THE EPITHELIUM?

**BASAL CELL** 

**GOBLET CELLS** 

**ENDOCRINE CELLS** 

CILIATED CELLS

**UNCILIATED CELLS** 

THE STRUCTURES IN THE FORM OF OPEN SACS, THE INNER SURFACE OF WHICH IS LINED WITH A SINGLE LAYER OF EPITHELIUM, WHICH IS FORMED BY RESPIRATORY AND SECRETORY CELLS, ARE REPRESENTED IN THE ELECTRON MICROGRAPH. WHAT ARE THE STRUCTURES?

THE ALVEOLI

**BRONCHIOLES** 

**ACINI** 

**ALVEOLAR DUCTS** 

**TERMINAL BRONCHI** 

THE CELLS WITH A DOMED APICAL PART WITH MICRIVILLI ARE DETECTED IN THE RESPIRATORY EPITHELIUM. THE CELLS CONTAIN WELL DEVELOPED SYNTHETIC APPARATUS, AND IN THE APICAL PART - SECRETORY GRANULES. NAME THIS CELL.

CLARA CELL
GOBLET
ENDOCRINE
CELLS WITHOUT BRUSH BORDER
UNDIFFERENTIATED CELL

THE RESPIRATORY DISTRESS SYNDROME DEVELOPS IN PREMATURE INFANTS. INSUFFICIENCY OF WHICH COMPONENTS OF THE BLOOD – AIR BARRIER TAKE PLACE IN THE BASIS OF THIS PATHOLOGY? SURFACTANT

**ENDOTHELIUM OF CAPILLARY** 

THE BASAL MEMBRANE OF ENDOTHELIAL CELL

THE BASAL MEMBRANE OF ALVEOLOCYTES

**ALVEOLOCYTES** 

THE CELLS OF OVAL OR TRIANGULAR SHAPE, NOT TALL ARE VISIBLE AS THE COMPONENT OF PSEUDOSTRATIFIED CILIATED EPITHELIUM OF TRACHEA IN THE HISTOLOGICAL SLIDE. THEIR APEXES DO NOT ACHIEVE THE SURFACE OF EPITHELIUM, THE FIGURES OF MITOSIS APPEAR IN SOME CELLS. WHAT FUNCTION IS PERFORMED BY THESE CELLS.

**SOURCE OF REGENERATION** 

PART OF MUCOUS-CILIARY COMPLEX

**MUCUS-SECRETING** 

SECRETE SURFACTANT

PRODUCE BIOLOGICAL ACTIVE SUBSTANCES

AS A RESULT OF INJURY, THE MUCOSA OF THE UPPER PART OF THE NOSE DAMAGED IN MAN OF 30 YEARS OLD. WHAT CONSEQUENCES AFTER THIS INJURY?

DISTURBANCE OF SMELL

DISTURBANCE OF THE HUMIDIFICATION

DISTURBANCE OF SECRETORY ACTIVITY OF GOBLET CELLS

DISTURBANCE OF WARMING AIR

DISTURBANCE OF WARMING AND HUMIDIFICATION

THE ALVEOLAR CELLS BELONGING TO THE AIR-BLOOD BARRIER REVEALED IN THE ELECTRON MICROGRAPHS . WHAT

ARE THESE CELLS?

RESPIRATORY ALVEOLOCYTES

SECRETORY ALVEOLOCYTES

**ALVEOLAR MACROPHAGES** 

CLARA CELL

**BRUSH CELLS** 

AS THE RESULT OF AUTOPSY, THE DAMAGED BRONCHI WITH CLEARLY VISIBLE GLANDS, CARTILAGE ISLANDS AND PSEUDOSTRATIFIED CILIATED EPITHELIUM WERE REVEALED. WHICH TYPE OF BRONCHI WITH CHANGES?

SECONDARY BRONCHI

MAIN BRONCHUS

LARGE BRONCHI

**SMALL BRONCHI** 

**TERMINAL BRONCHIOLES** 

THE CHILD OF TWO YEARS HAS REDUCED THE EXCRETION OF MUCUS FROM THE BRONCHIAL TREE. WITH IMPAIRED FUNCTION OF WHICH CELL ORGANELLES OF THE SURFACE EPITHELIUM OF THE BRONCHI IT CAN BE CONNECTED? CILIA

THE MITOCHONDRIA

**ENDOPLASMIC RETICULUM** 

**MICROVILLI** 

LYSOSOMES

THE HYPEREMIA AND INCREASED PRODUCTION OF MUCUS IN THE NASAL CAVITY FOUND IN PATIENTS WITH ACUTE RHINITIS. THE ACTIVITY OF WHICH EPITHELIAL CELLS OF THE MUCOUS MEMBRANE IS INCREASED? GOBLET

CILIATED BRUSH BASAL ENDOCRINE

THE ELECTRON MICROGRAPH PRESENTED LUNG BIOPSY OF A PREMATURE BABY. THE COLLAPSE OF ALVEOLAR WALLS DUE TO LACK OF SURFACTANT DETECTED. THE DYSFUNCTION OF WHICH CELLS OF THE WALL OF THE ALVEOLI LEADS TO THIS SITUATION?

ALVEOLOCYTES TYPE II
ALVEOLAR MACROPHAGES
SECRETORY CELLS
FIBROBLASTS

IT IS KNOWN THAT AN IMPORTANT COMPONENT OF BLOOD-AIR BARRIER IS THE ALVEOLAR SURFACTANT COMPLEX, WHICH PREVENTS COLLAPSE OF ALVEOLI DURING EXPIRATION. WHAT ALVEOLAR CELLS SYNTHESIZE PHOSPHOLIPIDS GOING TO BUILD SURFACTANT?

EPITHELIOCYTES TYPE II
RESPIRATORY CELLS
EPITHELIOCYTES WITH BRUSH BORDER
ALVEOLAR MACROPHAGES
CAPILLARY ENDOTHELIUM

TRUE DIPHTHERITIC CROUP ARISES FROM DEPOSITS OF FIBRIN TIGHTLY ADJACENT TO EPITHELIUM ON THE TRUE VOCAL CORDS. WHICH OF THE FOLLOWING TYPES OF EPITHELIUM LINED MUCOUS MEMBRANE OF THE VOCAL CORDS?

STRATIFIED SQUAMOUS NONKERATINIZED STRATIFIED SQUAMOUS KERATINIZING PSEUDOSTRATIFIED CILIATED SIMPLE SQUAMOUS SIMPLE CUBOIDAL

THE ORGAN IS ON THE SLIDE, THE WALL OF WHICH CONSISTS OF THE MUCOSA, SUBMUCOSA, FIBRO-CARTILAGE AND ADVENTITIA. TYPE OF EPITHELIUM - PSEUDOSTRATIFIED CILIATED. SEROUS – MUCOUS GLANDS PRESENT IN THE SUBMUCOUSA. HYALINE CARTILAGE FORMS LARGE PLATES. WHAT IS THIS ORGAN?

LARGE BRONCHI ESOPHAGUS THE TRACHEA

LARYNX

**SMALL BRONCHI** 

THE STRUCTURE, WHICH INCLUDE SURFACTANT, ALVEOLOCYTES TYPE I, BASEMENT MEMBRANE AND THE ENDOTHELIUM OF FENESTRATED CAPILLARIES ARE PRESENTED ON THE ELECTRON MICROGRAPH. WHICH HISTO-HEMATIC BARRIER IS FROM LISTED BELOW?

BLOOD-AIR BARRIER BLOOD-BRAIN BARRIER BLOOD-THYMUS BARRIER BLOOD- CSF BARRIER BLOOD-TESTES BARRIER

SAMPLE OF RESPIRATORY TRACT TISSUE CONSISTS OF THE SURFACE EPITHELIUM WITH CILIATED AND GOBLET CELLS FORMING MUKO-CILIARY COMPLEX. SPECIFY WHICH FUNCTION BELONGS TO THIS COMPLEX.

CLEARING THE AIR FROM DUST PARTICLES

**SECRETION OF HORMONES** 

**WARMING AIR** 

**HUMIDIFICATION** 

RESPIRATORY

THE GLANDS, CARTILAGE ISLANDS AND PSEUDOSTRATIFIED CILIATED EPITHELIUM ARE CLEARLY VISIBLE IN THE WALL OF THE BRONCHUS DURING HISTOLOGICAL EXAMINATION. WHICH BRONCHI ARE PRESENTED?

SECONDARY BRONCHI

MAIN BRONCHUS

LARGE BRONCHI

**SMALL BRONCHI** 

**TERMINAL BRONCHIOLES** 

THE CHILD BREATHED THE BUTTON WHICH THEN WAS REMOVED FROM THE RIGHT MAIN BRONCHUS BY USING A BRONCHOSCOPE. WHAT BRONCHIAL EPITHELIUM IS MOST LIKELY DAMAGED BY AN OBJECT?

SIMPLE PSEUDOSTRATIFIED CILIATED

STRATIFIED NONKERATINIZED

SIMPLE COLUMNAR

**TRANSITIONAL** 

SIMPLE SQUAMOUSE

THE MALIGNANT EPITHELIAL TUMOR, ORIGINATING IN THE BRONCHUS OF MEDIUM SIZE HAD BEEN DIAGNOSED IN A MAN OF 66 YEARS OLD. WHAT EPITHELIUM IS THE SOURCE OF DEVELOPMENT OF THIS TUMOR?

**PSEUDOSTRATIFIED CILIATED** 

STRATIFIED NONKERATINIZED

STRATIFIED KERATINIZED

TRANSITIONAL

SIMPLE COLUMNAR

A MAN OF 56 YEARS DIAGNOSED WITH A BENIGN EPITHELIAL TUMOR OF THE TRACHEA. WHAT EPITHELIUM IS A SOURCE OF TUMOR DEVELOPMENT?

**PSEUDOSTRATIFIED CILIATED** 

STRATIFIED NONKERATINIZED

STRATIFIED KERATINIZED

**TRANSITIONAL** 

SIMPLE COLUMNAR

THE TRACHEAL WALL IS DAMAGED DURING PERFORMING INTUBATION. THE INTEGRITY OF WHAT TYPE OF

**EPITHELIUM WAS BROKEN?** 

**PSEUDOSTRATIFIED CILIATED** 

SIMPLE COLUMNAR

STRATIFIED NONKERATINIZED

STRATIFIED KERATINIZED

SIMPLE SGUAMOUSE

THE HOLLOW ORGAN IS REPRESENTED IN HISTOLOGICAL SLIDE. THE MUCOSA IS COVERED BY TWO-LAYERED CILIATED EPITHELIUM WHICH CHANGES TO SINGLE ROW. MUSCULARIS MUCOSA IS WELL DEVELOPED IN RELATION TO THE THICKNESS OF THE ENTIRE WALL. CARTILAGE AND GLANDS ARE OBSERVED. WHAT ORGAN IS REPRESENTED IN THE SLIDE?

**SMALL BRONCHI** 

MIDDLE BRONCHUS

THE TRACHEA

**LARYNX** 

**URINARY BLADDER** 

THE BACTERIA ENTER ALVEOLI. THIS RESULTED IN AN ACTIVE STATE OF THE CELL, WHICH ARE LOCATED IN THE WALLS OF THE ALVEOLI AND THEIR SURFACE. WHAT IS A CELL?

**ALVEOLAR MACROPHAGES** 

ALVEOLOCYTES TYPE I

**ENDOTHELIOCYTES** 

CLARA CELL

**AVEOLOCYTES TYPE II** 

TERMINAL BRONCHIOLES REVEALED IN LUNG BIOPSY WITH MICROSCOPIC EXAMINATION. WHAT EPITHELIUM LINES

THIS TYPE OF BRONCHIOLES?

SIMPLE CUBOIDAL CILIATED

STRATIFIED SQUAMOUS NONKERATINIZED

**PSEUDOSTRATIFIED CILIATED** 

SIMPLE CUBOIDAL

**PSEUDOSTRATIFIED CILIATED** 

THE PATIENT COMPLAINS OF DRYNESS OF THE NASAL CAVITY. IN THE STUDY OF THE MUCOUS MEMBRANE OF THE NASAL CAVITY IS ESTABLISHED VIOLATION OF THE FUNCTION OF MUCOUS GLANDS. IN WHICH LAYER OF THE MUCOUS MEMBRANES OF THE NASAL CAVITY THESE GLANDS ARE LOCATED?

IN THE LAMINA PROPRIA

IN THE EPITHELIUM

IN THE MUSCULARIS MUCOSA

IN THE SUBMUCOSA

IN THE FIBRO-CARTILAGINOUS PLATE

IT IS KNOWN THAT WORKING IN A COAL MINE IS ASSOCIATED WITH THE INHALATION OF LARGE AMOUNTS OF COAL DUST. IN WHICH LUNG CELLS THE COAL DUST CAN BE DETECTED?

**ALVEOLAR MACROPHAGES** 

RESPIRATORY EPITHELIAL CELLS

SECRETORY EPITHELIAL CELLS

**CAPILLARY ENDOTHELIOCYTES** 

**CAPILLARY PERICYTES** 

THE DESTRUCTION OF CELLS RESPONSIBLE FOR RESPIRATORY FUNCTION CAN BE SEEN DURING INFLAMMATION OF THE LUNG IN HISTOLOGICAL SLIDE. WHAT ARE THESE CELLS?

ALVEOLOCYTES TYPE I

**ALVEOLOCYTES TYPE II** 

**MACROPHAGES** 

**CLARA CELL** 

LYMPHOCYTES

THE TUBE SHAPED ORGAN OF RESPIRATORY SYSTEM, IN WHICH LOW EPITHELIUM, WELL DEVELOPED MUSCLE LAYER, ABSENCE OF GLANDS AND CARTILAGE CAN BE OBSERVED IN HISTOLOGICAL SLIDE. NAME THIS ORGAN.

**SMALL BRONCHI** 

THE TRACHEA

LARYNX

LARGE BRONCHI

MIDDLE BRONCHI

THE STRUCTURE, WALL OF WHICH CONSISTS OF SIMPLE CUBOIDAL CILIATED EPITHELIUM, PLATE OF SMOOTH MYOCYTES, FOLDS OF MUCOSA LAYER ARE ABSENT. WHAT IS THIS STRUCTURE?

**TERMINAL BRONCHUS** 

**SMALL BRONCHUS** 

MIDDLE BRONCHUS

LARGE BRONCHUS

**MAIN BRONCHUS** 

DISTURBANCE OF SMELL IS REVEALED IN A BOXER AFTER THE INJURY OF THE NOSE. SPECIFY THE CELL DAMAGE THAT CAN LEAD TO LOSS OF SMELL.

**NEUROSENSORY CELLS** 

SUPPORTING EPITHELIAL CELLS

THE BASAL EPITHELIAL CELLS

CILIATED EPITHELIAL CELLS

**BRUSH CELLS** 

A NEWBORN WAS UNABLE TO MAKE THE FIRST BREATH. IN ANALYZING THE CAUSES OF DEATH WERE REVEALED THAT AIRWAYS ARE FREE, BUT LUNGS ARE FALLEN DOWN. WHAT IS THE MOST LIKELY CAUSE OF LUNG STATE IN THIS CASE? THE ABSENCE OF SURFACTANT

**BRONCHOCONSTRICTION** 

RUPTURE OF THE BRONCHI

PLEURAL THICKENING

INCREASING THE SIZE OF THE ALVEOLI

THE LARGE CELL, IN THE CYTOPLASM OF WHICH MANY MITOCHONDRIA, WELL DEVELOPED GOLGI COMPLEX, OSMIOPHILIC LAMELLAR CORPUSCLES ARE PRESENT IN ELECTRON MICROGRAPH OF THE WALL OF PULMONARY ALVEOLI. WHICH FUNCTION IS PERFORMED BY THIS CELL?

PRODUCES SURFACTANT

IS A COMPONENT OF BLOOD-AIR BARRIER

WARMS THE AIR

**CLEAN AIR** 

**ENGULFS MICROORGANISMS** 

THE DESQUAMATION OF THE EPITHELIUM IN THE BRONCHI OCCURS AS A RESULT OF THE PATHOLOGICAL PROCESS . DUE TO WHICH CELLS REGENERATION OF THE EPITHELIUM WILL OCCUR?

**BASAL** 

**CLARA CELLS** 

**CILIATED** 

**ENDOCRINE** 

**GOBLET** 

THE PATIENT WAS ADMITTED TO THE DEPARTMENT WITH ASTHMA ATTACKS CAUSED BY SPASM OF THE SMOOTH MUSCLES OF THE RESPIRATORY PASSAGES. NAME THE DIVISIONS OF THE AIRWAY, PATHOLOGY OF WHICH RESULTS TO THIS ATTACK:

THE BRONCHI OF SMALL CALIBER

**BRONCHI MEDIUM SIZE** 

LARGE BRONCHI

**TERMINAL BRONCHIOLES** 

RESPIRATORY BRONCHIOLES

THE SPECIAL CELLS ARE PRESENT IN THE WALL OF THE LUNG ALVEOLI WHICH PARTICIPATE IN THE GAS EXCHANGE AND FORMATION OF BLOOD-AIR BARRIER. WHAT ARE THESE CELLS?

**ALVEOLOCYTES TYPE I** 

**CLARA CELL** 

**ALVEOLAR MACROPHAGES** 

ALVEOLOCYTES TYPE II

**BRUSH CELLS** 

THE INFLAMMATORY PROCESS IN THE TRACHEA WHICH OCCUPIES OF THE EPITHELIUM AND LAMINA PROPRIA TAKE PLACE IN THE PATIENT. WHAT EPITHELIUM HAS CHANGED?

**PSEUDOSTRATIFIED CILIATED** 

STRATIFIED SQUAMOUS NONKERATINIZED

STRATIFIED CUBOIDAL CILIATED

SIMPLE SQUAMOUS CILIATED

SIMPLE CUBOIDAL

IT IS KNOWN THAT TOBACCO SMOKE DAMAGES THE EPITHELIUM OF THE CONDUCTING PORTION OF THE RESPIRATORY SYSTEM, INJURED ITS DRAINAGE FUNCTION. WHAT CELLS PROVIDE THE DRAINAGE OF THE FOREIGN PARTICLES FROM THE TRACHEA AND BRONCHI?

**CILIATED** 

**GOBLET** 

**ENDOCRINE** 

BASAL

WITH MICROVILLI