

QUESTIONS AND EXERCISES

Answer:

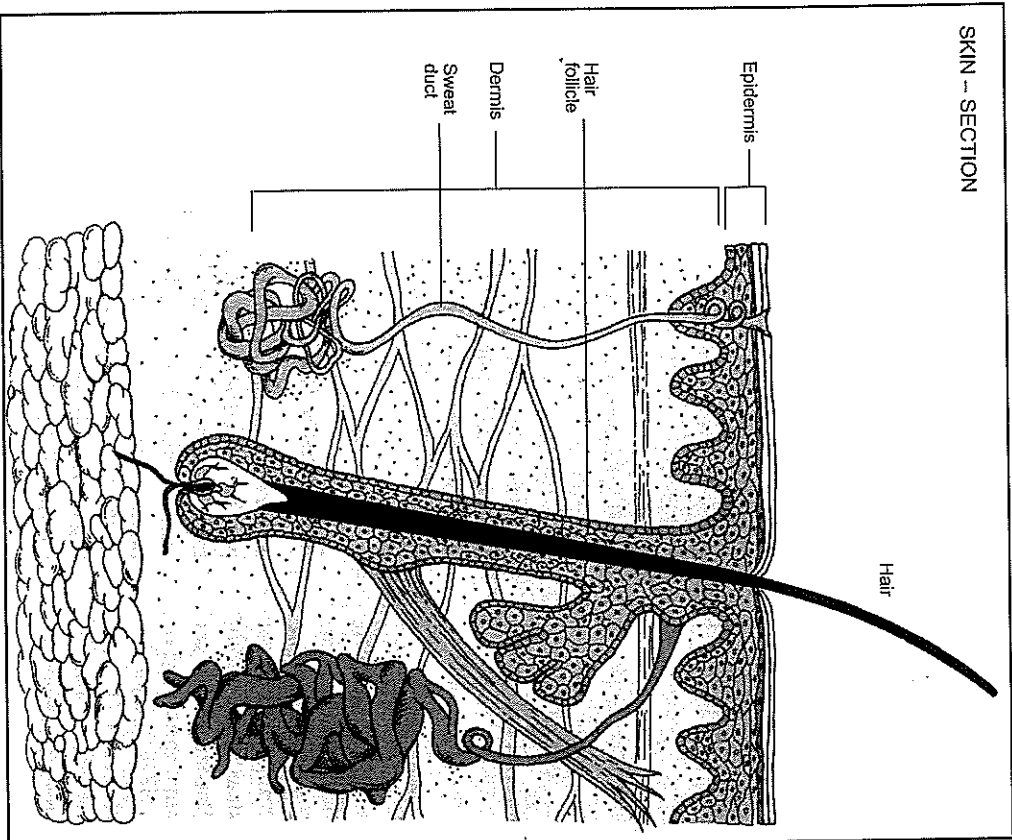
1. What is gynaecology interested in?
2. What is family planning?
3. What is the basic division of methods of conception control?
4. Talk about the rhythm method.
5. What do you think about the safety of this method?
6. What are the most popular methods of contraception used by the female?
7. Talk about some methods used by the male.
8. How is it possible to prevent fertilization after unprotected intercourse?
9. List some side effects of using an IUD?
10. Talk about the "pills" as a method of contraception.
11. Talk about some side effects of taking the pill.
12. What do you think about male and female sterilization?
13. Talk shortly about pregnancy.
14. Explain some complications of pregnancy.
15. What do you think about an induced abortion (interruption)?
16. "Abortion hurts women and kills children" – do you agree with this slogan?

Translate:

plánované rodičovství; vhodná antikoncepce; plánovat počet dětí v rodině; kontrola početí; ekonomické a životní podmínky; zdraví člověka; plodné období menstruačního cyklu; široce praktikovaná metoda antikoncepce; nepravdivý cyklus; měřit si každé ráno bazální teplotu; vzestup teploty kolem 15. dne cyklu; spermicidní pesary a krémy; přijatelný pro mnohé ženy; DANA; vyrobený z kovu nebo z plastické hmoty; poskytnout ochranu před nechťěným těhotenstvím; vedlejší účinky; mimoděložní těhotenství; antikoncepční tablety; redukovat množství ztráty krve; citlivost prsu; zvýšení váhy; vyhovuje to oběma partnerům; sterilizace může být přijatelné řešení

19. THE INTEGUMENTARY SYSTEM

The integumentary system protects the body against pathogenic organisms and injury. It consists of the skin, lymph canals and lymph nodes.

The Skin

The skin is a protective, elastic, waterproof and sensitive organ covering the entire body surface, and has two layers:

- a) **Epidermis** – or the outer skin, which consists of closely packed epithelial cells and is divided into layers of the epithelial tissue. The top layer of cells is continuously shed from the body as inner cells reproduce themselves; these new cells push the upper ones to the surface, where they die and slough off – this process is called desquamation. The body makes and loses millions of these cells every day.
- The epidermis contains no blood vessels but it contains melanin. This is a pigment that determines the dark or light colour of the skin and is inherited genetically. Some other factors, such as sunlight, can increase deposits of melanin in the epidermis. This is the body's method of protecting the skin from damage due to long exposure to sunlight.
- b) **Dermis** – is the second layer, which is composed of connective tissue. It contains nerves, capillaries and lymph vessels. Sensory nerve endings provide the sense of touch.

Hair, nails and oil glands are called the **skin appendages**. Hairs grow on all body surfaces except the palms of the hands and the soles of the feet. The roots of hairs are located in the dermis; each hair has a follicle, that surrounds the roots and capillaries around the follicle to provide nourishment. Small muscles are attached to every hair follicle and are contracted when the body is exposed to cold. This action causes the hair to stand up and increases the oil supply to the skin, which prevents further loss of heat from the body surface. The reactions of the skin to cold are small muscle contractions promoting shivering which produces heat when additional warmth is needed. The oil also slows the evaporation of water from the skin.

Nails, which are hardened epidermal tissue, serve as tough protective plates for ends of fingers and toes and also assist in picking up objects.

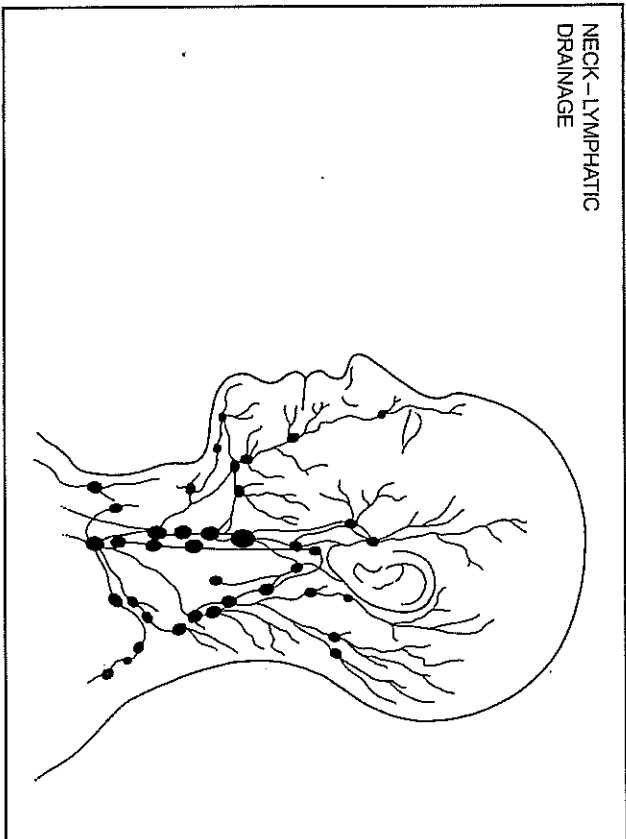
The skin has several vital functions such as protecting against micro-organisms and toxic substances, sense of touch, regulation of body temperature and elimination of body waste. As to elimination, the skin influences the loss of body fluids through perspiration. It is also a means of elimination of certain salts, which helps to maintain the mineral balance of the body. In addition, the skin protects the body against chemicals in the air and ultraviolet rays from the sun. Body hair aids in protection of the skin against burns from the sun's gamma rays; hair in the nasal cavities

acts as a barrier to harmful particles in the air, etc. The sense of touch keeps the body aware of its surroundings and protects it by transmitting messages to the brain and from the brain to the muscles.

The Lymphatic System

The lymphatic system is actually a part of the circulatory system.

NECK – LYMPHATIC DRAINAGE



Lymph is a clear liquid, which is formed as blood cells are filtered out of the plasma in capillaries. The function of lymph is similar to that of blood – transportation. It assists in exchanging nutrients and oxygen.

Lymph nodes are cluster-like formations along lymph channels.

They have two functions:

1. Production of lymphocytes and monocytes,
2. Filtration of harmful substances, such as pathogens and abnormal cells.

Lymph nodes increase in size when these harmful substances are filtered, so any palpable lymph nodes, especially in the neck and armpit, are signs of a disorder.

Skin Disorders

The medical speciality concerned with the diagnosis and treatment of disorders of the skin is called **dermatology**.

Most skin disorders are not life threatening, but they cause much irritation, discomfort and pain. Generally, a skin disorder is a result of one or more of the following: exposure to an allergen, emotional stress, changes in environmental temperature, a systemic disorder, nutritional deficiency or aging (e.g. loss of natural skin moisture and tissue elasticity which leads to dryness and wrinkling).

About 30% of all skin diseases belong to dermatitis – **eczema**. There are several types of dermatitis: allergic reaction, heat reaction and seborrhoea. Causes of **allergic dermatitis** include plant poisoning, contact with chemicals or fibres and drugs. A most common symptom is erythema, which is a redness of skin, and also papules and vesicles. The causes of **prickly heat or miliaria** are warm environmental temperatures, especially with high humidity, combined with excessive clothing; infants and obese people are very susceptible.

Seborrhoea is an overproduction of oil from the sebaceous glands of the skin and affects especially the eyelids, eyebrows, ears and scalp.

The skin can also be invaded by bacteria, viruses and fungi that can cause inflammation or infection. Streptococcal infection of the skin is called **impetigo**. It often develops from insect bites and scratching. Symptoms of impetigo are vesicles that develop into pustules, then rupture and form crusts. After removing the crusts, a topical antibiotic is applied to each lesion and if there are lesions over a large percentage of the body, it may be necessary to administer antibiotics systematically to destroy the bacteria. The commonest viral diseases, which affect the skin, are warts and herpes. Common warts are seen mostly on the fingers, hands and knees. They are not infectious and do not spread from person to person, but the initial lesion spreads and produces multiple ones. Unwanted warts can be removed by subfreezing temperature from chemicals (dry-ice); even sometimes they may subside without treatment.

Herpes virus causes vesicles on the mucous membrane of the lip and nose. The virus invades the skin when the person's resistance has been lowered by stress or by another illness such as an upper respiratory infection. Topical treatment can relieve the pain and burning but viruses cannot be destroyed by medication. Fortunately, herpes simplex is a self-limiting condition of relatively short duration, approximately 7 to 10 days.

Acne vulgaris is a condition in which sebaceous glands are overactive and produce papules and pustules that damage especially the face of an adolescent. Acne is related to hormonal changes and to increased production of oil during puberty and it is expected to improve afterwards, mainly due to good care of the skin, which includes frequent washing with non-greasy soap, application of drying agents and avoiding creams and lotions.

Psoriasis is a genetic, chronic skin disorder that causes an overproduction of epithelial cells. Recurrence of symptoms is stimulated by stress, infection, skin injury or cold temperatures. Treatment includes exposure to ultraviolet light and application of topical corticosteroids.

Abnormal cell growth of skin is also common; some growths are benign and some can be malignant. **Carcinoma**, the most common malignant tumour of the skin, is most likely to occur in individuals who are exposed to sunlight for long periods. Radiation treatment of skin carcinoma is successful, if early diagnosis is made. Other skin tumours are keloid, angioma, keratosis and melanoma.

Keloid is an overgrowth of scar tissue, which may occur after surgical procedures and trauma. **Angioma** is a benign tumour, present at birth and consists of blood vessels. It is usually small, red and elevated and can be excised surgically. A highly malignant cancer, **melanoma**, begins as a nevus or dark mole. It may be present for some time or may appear suddenly. Any nevus that enlarges or changes in size, colour or character is possibly a melanoma. Long exposure to sunlight may transform an existing nevus into cancerous tissue.

VOCABULARY

acne [ækni:]	trudovina
appendage [ə'pendidʒ]	přívěsek
armpit [a:mpit]	podpažní jamka
boil [boil]	vřít, vřídek
crust [krast]	strup
dermatitis [de:mə'taitis]	zánět kůže
dermatology [de:mə'toladʒi]	kožní lékařství
desquamation [deskwə'meiʃn]	odlupování buněk
downgrowth [daunggraʊθ]	vyrůstek
dryness [draɪnis]	suchost
eczema [eksɪmə]	ekzém

encounter [an'kauntə]	setkat se s
erythematous [eri'θi:mətəs]	zarudlý
evaporation [i'væpə'reiʃn]	vypařování, odpařování
fibre [faɪbə]	vláknó
folding [faʊldɪŋ]	záhyb
follicle [fɒlɪkl]	váček
furuncle [fjʊərənkl]	nežít
apocrine gland [æpəkraɪn]	apokrinní žláza
cutaneous gland [kjʊ:'teɪnjəs]	kožní žláza
sebaceous gland [si'beɪsəl]	mazová žláza
herpes zoster [hɜ:'pi:z zɒstə]	pásový opar
humidity [hju:'mɪdətɪ]	vlhkost
impetigo [ɪmpɪ'teɪɡəʊ]	impetigo
itch [ɪtʃ]	svědit, svrab
keratin [kəraɪn]	rohovina
basal cell layer [beɪsəl sel]	vrstva bazálních buněk
granular cell layer [grænju:lə]	zrnitá vrstva
prickle-cell layer [prɪkl-sel]	vrstva trnitých buněk
leprosy [leprəsi]	malomocenství
lesion [li:'zi:n]	poranění, poškození
miliaria [mɪlɪ'eəriə]	potničky
mole [məʊl]	mola; zasněť
naevus, naevi [ni:'ves]	mateřské znaménko
nail [neɪl]	zde: nehet
nodule [nɒdju:l]	uzlík
nongreasy [nɒŋgrɪ:'zi]	nemastný
nourishment [nʌrɪʃmənt]	potrava, výživa
palm [pɑ:m]	dlaň
palpable [pælpəbəl]	hmataitelný
papilla [pe'pɪlə]	papila, bradavka
papula, pl. papulae [pæpjʊlə]	malý pupen
particle [pɑ:tɪkl]	částička
perspiration(sweat) [pɜ:'speɪ'reɪʃn]	pot, pocení
protective plates [prə'tektɪv pleɪts]	ochranné destičky
scale [skeɪl]	šupina, povlak
subcutaneous [sʌbkju:'teɪnjəs]	podkožní
sweat duct [swet dakt]	potní kanálek
trauma [tro:mə]	úraz, poranění

touch [tʌʃ]	dotýk
vesicle [vesɪkl]	puchýřek
wart [wɔ:t]	bradavice
waste [weɪst]	zbytky
wrinkle [rɪŋkl]	vráska, svrásčit se

QUESTIONS AND EXERCISES

Answer:

1. What is the role of the integumentary system?
2. What does the integumentary system consist of?
3. Describe the two layers of the skin.
4. What is melanin?
5. What are the skin appendages?
6. Describe the function of each of them?
7. What is dermatology?
8. What are the causes of eczema?
9. What is impetigo?
10. Describe the commonest viral diseases of the skin.
11. What do you know about skin cancers?
12. What is the function of the lymphatic system?

Translate:

kožní systém; vodotěsný a citlivý orgán; dvě vrstvy; buňky se obnovují; odlupovat se; obsahovat barvivo; určovat barvu kůže; ochrana kůže před poškozením; skládá se z pojivové tkáně; rostu na celém povrchu těla; tělo je vystaveno chladu; zabránit další ztrátě tepla; citlivost na dotyk; udržování tělesné teploty; vylučování určitých zbytků; ultrafialové paprsky; předávání zpráv do mozku; produkování tuku zpomaluje vypařování vody; kožní lékářství; vráscitá kůže; alergická reakce; pupence; puchýřky a bradavice; potničky; viry mohou způsobit zanícení kůže; kousnutí hmyzu a škrábance; strupy; opary; zlepšit se díky dobré péči o kůži; časté umývání; mateřské znaménko