



ANATOMY TEAM

Surface ANATOMY

LECTURE 20

OBJECTIVES:

By the end of the lecture, students should be able to:

- Palpate and feel the bony the important prominences in the upper and the lower limbs.
- Palpate and feel the different muscles and muscular groups and tendons.
- Perform some movements to see the action of individual muscle or muscular groups in the upper and lower limbs.
- Feel the pulsations of most of the arteries of the upper and lower limbs.
- Locate the site of most of the superficial veins in the upper and lower limbs

تنويه : هذا العمل لا يعتبر مصدر أساسي للمذاكره وإنما هو للمراجعة فقط ، وتم التأكد بأنه لا يوجد أي اختلاف بين
سلايد الأولاد والبنات

Male Section Notes:

- When there is a plural infusion that will dislocate the trachea.
- When the elbow is flexed, the olecranon forms the apex of an equilateral triangle, of which the epicondyles form the angles at its base.
- Fractures of any of the elbow triangle, structures will disturb this arrangement.
- The heads of the metacarpals form the knuckles of the hand & they are formed by the heads of the proximal and middle phalanges.
- The 3rd metacarpal head is the most prominent.
- The brachial artery can be felt pulsating deep to the medial border of the biceps.
- To stop bleeding by pressure on the artery in the upper half of the arm it is pushed laterally against the humerus, and in the lower half it is pushed posteriorly.
- The paralysis of radial nerve will lead to depressed hand.
- ASIS. (Anterior Superior Iliac Spine).
- PSIS. (Posterior Superior Iliac Spine).
- Midinguinal point: Is a point on the inguinal ligament midway between the symphysis pubis and the ASIS.

Female Section Notes:

- Below the greater tuberosity we can't feel any bone because muscles cover all of them.
- The posterior border of ulna can be felt specially when the arm is flexed.
- Metacarpals can be felt individually.
- Median cubital vein connect cephalic and basilica veins, it's so superficial and supported by bicipital aponeurosis behind it.
- Any injury of the hand, which result in pain in the anatomical snuffbox, we suspect fracture in scaphoid bone.
- The vessels which supply the thigh pass behind inguinal ligament at the midinguinal point.

- The mass of the **long flexors of the forearm** forms the medial border of the fossa (mainly pronator teres).
- The **lateral group of the forearm extensors**, the long extensors of the wrist and brachioradialis lie between the fossa and the lateral epicondyle.

http://www.theodora.com/anatomy/surface_anatomy_index.html

Review Questions:

1-What is surface anatomy?

It is a branch of gross anatomy that examines shapes and markings on the surface of the body.

2-Between the 2 sternal ends of the 2 clavicle there lies the?

jugular notch (suprasternal notch).

3-Between the 2 sternal ends of the 2 clavicle lies the jugular notch (suprasternal notch), what we can palpate the ?

Trachea(should be central).

4-We can palpate the coracoid process of scapula in the?

lateral one third of the clavicle in the Deltopectoral GROOVE or claviopectoral triangle.

5-What bounded the claviopectoral or the (Deltopectoral) triangle?

- Clavicle superiorly,
- Deltoid laterally, and
- Clavicular head of Pectoralis major medially.

6- The lateral and posterior borders of the acromion meet to form?

the acromial angle.

7-What is the only muscle which is connected to the lesser tubercle?

Subscapularis. Its nerves are upper & lower subscapularis

8-What we can locate in cubital fossa?

- Cephalic vein
- Basilic vein and
- Median cubital vein are clearly visible.

9- Why the median cubital vein is the vein of choice for IV line?

It crosses over the bicipital aponeurosis and it will separate rapidly.

10- What are the structures that are palpable in the inguinal region?

- Symphysis pubis.
- Body of pubis.
- Pubic tubercle.
- ASIS. (Anterior Superior Iliac Spine).

11-On the medial aspect of the knee Joint, what we can palpate?

- Medial femoral condyle
- Medial tibial condyle
- The 3 tendons of: **SGS => سنة جدك سعيدة**
 1. Sartorius.
 2. Gracilis
 3. Semitendinosus.

12-On the lateral aspect of the knee Joint, what we can palpate?

- Lateral femoral condyle
- Lateral tibial condyle
- Head of the fibula
- Neck of the fibula
- Tendon of biceps femoris.

Quiz

- 1) We can palpate All of following except?
 - A) clavicle
 - B) the shaft of the Humerus
 - C) the iliac crest
 - D) linea aspera
- 2) where can we palpate the trachea ?
 - A)inferior to clavicle bone
 - B)in jugular notch
 - C) Between the 2 sternal ends of the 2 clavicle
 - D)B+c
- 3) we can palpate the caracoid process
 - A)above the lateral one third of the clavicle
 - B)below the lateral one third of the clavicle
 - C)lateral to radias
 - D)b+c
- 4) which one of the following is not included in the boundaries of clavipectoral triangle?
 - A) clavicle
 - B) Pectoralis major
 - C) Pectoralis minor
 - D) Deltoid
- 5) which one of the following is the most lateral bony point of the shoulder?
 - A)The greater tubercle of humerus.
 - B) Acromin process.
 - C) Acromioclavicular joint.
 - D)None
- 6) which one of the following is True about the acromial angle ?
 - A) The medial and posterior borders of the acromion meet to form it.
 - B) The lateral and posterior borders of the acromion meet to form it.
 - C) The lateral and anterior borders of the acromion meet to form it.
 - D) The inferior and posterior borders of the acromion meet to form it.

- 7) All of the following is easy to palpate except ?
- A) the head of ulna
 - B) anterior border of ulna
 - C) ulnar styloid process
 - D) posterior border of ulna
- 8) When the elbow joint is extended ..
- A) the capitulum forms the apex of an equilateral triangle.
 - B) the olecranon forms the apex of an equilateral triangle.
 - C) the medial and the lateral epicondyles lie in a straight line.
 - D) the tip of the olecranon process, the medial and the lateral epicondyles lie in a straight line.
- 9) It is easy to palpate the head of the radius with?
- A) Supination
 - B) Adduction of elbow joint
 - C) abduction of elbow joint
 - D) none
- 10) which one of heads of metacarpals (the knuckles of the hand) is most prominent?
- A) 1st
 - B) 2nd
 - C) 3rd
 - D) 4th
- 11) Which one of the following form The anterior axillary folds?
- A) pectoralis minor
 - B) pectoralis major
 - C) latissimus dorsi
 - D) teres major
- 12) pulsation of the axillary artery can be felt
- A) down the axilla.
 - B) high up in the axilla.
 - C) above lesser tubercle of Humerus.
 - D) below lesser tubercle of Humerus.

- 13) The borders of the deltoid are visible when
- A) the arm adducted
 - B) the arm abducted
 - C) the arm rotate laterally
 - D) the arm rotate medially
- 14) The **brachial artery** can be felt pulsating
- A) deep to the lateral border of the biceps.
 - B) Superficial to the medial border of the biceps
 - C) Superficial to the lateral border of the biceps
 - D) deep to the medial border of the biceps
- 15) to stop bleeding of brachial artery
- A) in the upper half of the arm it is pushed laterally against the humerus.
 - B) in the lower half of the arm it is pushed laterally against the humerus.
 - C) A & B
 - D) All of the above
- 16) which of the following is the vein of choice for IV line?
- A) Cephalic vein.
 - B) Basilic vein a.
 - C) Median cubital vein.
 - D) B + C
- 17) the pulsation of the radial artery can easily be felt
- A) in snuff box
 - B) anterior to the distal third of radius
 - C) posterior to the distal third of radius
 - D) A+b
 - E) A+C

- 18) when there is cutting in radial nerve , what is the sensory loss??
- A) lateral 2/3rd of the dorsal of the hand , lateral pollex and the half fingers up to proximal phalanx
 - B) medial 2/3rd of the dorsal of the hand , lateral pollex and the half fingers up to proximal phalanx.
 - C) lateral 1/3rd of the dorsal of the hand , lateral pollex and the half fingers up to distal phalanx
 - D) none
- 19) which one of these is not palpable in the inguinal region
- A) Symphysis pubis.
 - B) Body of pubis.
 - c) ischial spine.
 - D) anterior superior iliac spine
- 20) which artery you can pulse in mid inguinal point?
- A)common iliac
 - B) femoral
 - C)popliteal
 - D)dorsalis pides
- 21) which of the following is easy to palpate in medial aspect of the knee joint ?
- A) Medial femoral condyle.
 - B) letral femoral condyle.
 - C) Tendon of biceps femoris.
 - D) Head of the fibula

Answers

1	D
2	D
3	B
4	C
5	A
6	B
7	B
8	D
9	A
10	C
11	B
12	B
13	B
14	D
15	A
16	C
17	D
18	A
19	C
20	B
21	A

GOOD LUCK ;)