



Clinical Skills

Lecture no: 1

Title: Vital signs, lumps, lymph nodes

Physical Examination



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وَقُلْ رَبِّ زِدْنِي عِلْمًا

Vital signs

العلامات الحيوية

- pulses (cardiac rate)
- Respiratory rate
- Temperature
- Blood pressure.

1. pulses (cardiac rate)

- نقيسه من أماكن مختلفة • مرة الفحص :
- regular → 15 second x 4
 - Irregular → 1 minute

• Rate: (number of beats per minute):

< 60: bradycardia

> 100: tachycardia

**
* • Normal pulse rate:

60 - 100 beats per minute, regular rhythm

- Volume (force) of the pulse (weak, strong).
- rhythm (regular, irregular).

• Important site of pulses:

1. Radial artery =

قاعدة الإبهام

lies at the base of thumb proximal to the "bracket" of wrist skin creases.

لا تستخدم أبداً للفحص؛ لأنه فيه pulse

2. Brachial artery:

lies in the antecubital fossa medial to the biceps tendon.

3. Carotid artery: ||

lies in the neck next to the thyroid cartilage.

4. Femoral artery: felt in the groin below the inguinal ligament.

5. popliteal artery: lies between the heads of the gastrocnemius.

6. Posterior tibial artery: felt down behind the medial malleolus.

7. Dorsalis pedis artery:

felt between the heads of the first and second metatarsals.

سطح القدم

metatarsals - observe

2. Respiratory Rate:

• ما نحس المريض أنك يدك تقيس له لأنّه هو قادر على التحكم بسرعة تنفسه.

* Be aware that if a patient is aware that you are checking their respiratory rate, their breathing pattern may change.

• Respiratory should be observed for: نقط

- rate
- depth
- pattern of breathing

↳ normal:

12 - 20 per minute • بحسب الشهيق والزفير "واحد"

• Depth: is the volume of air moving in and out with each respiration.

* normal tidal volume for an adult 500 ml.

من اسباب تغير نطق التنفس

• pattern: Some causes for a change in pattern are:

- القلق anxiety
- الخوف Fear
- ketoacidosis
- extreme exertion.

• < 12 : Brady apnea

• > 20 Tachypnea

{3}: Temperature الحرارة

The normal temperature depending on:
1. Gender 2. Activity 3. Food and Fluid
4. Time of day 5. in women menstrual cycle.

normal temperature: 36.5 - 37.2

< 36.5 Hypothermia

> 37.2 Hyperthermia

Temperature can be taken in the following ways:

①: Orally : by mouth, using either the classic glass thermometer or modern digital thermometers. ننتبه انه المريض ما أكل شي ساخن

②: Rectally: using (glass or digital thermometer).

• (0.5 - 0.7) ^F higher than by mouth.

③: Axillary: mostly in children

• using glass or digital thermometer.

• (0.3 - 0.4) ^F lower than by mouth.

④: ear: special thermometer can quickly measure reflect the body's core temperature.

درجة الحرارة الالسكرية

⑤: By skin: - special thermometer can quickly measure T of the skin on the forehead.

④ Blood pressure

Lead

lumps, bumps, swelling

- Feature to Focus on when assessing any lump or swelling:

SPACESPIT

1) **Size**: measure the size of any lump
> 15 cm <

2) **Position**: موقعا بالرقبة، القدم، obvious sometime ^{واضح}

3) **Attachment**:

Is it fixed to underlying tissues?

If yes → Cancer or malignancy

4) **Consistency**:

From → vary soft, jelly, "stony" hard.

Cancer. ← إذا كانت hard like a rock ← قلة الحجر

5) **Edge**: الحواف • Sharp or soft.

• delineated or illdefined • regular, irregular

Is it easy to find the edge? If no → Cancer

6) **Surface** and **shape**:

↳ ~~Round~~ smooth or rough, regular or irregular

Is it regular and round? If no → Cancer

7) **pulsation**: نبض

"thrills and bruits"

النبض غير طبيعي مع

النبض الشرياني

If there is no pulse → Cancer

8) Inflammation : التهاب

most cancer are not inflammatory infection

Redness, tenderness, warmth : احمرار

9) Transillumination : يبرر الضوء؟

Transmitting light or no

cystic structure has fluid inside, not solid. -> Can be Cancer.

Lymph nodes العقد اللمفاوية

بالطبعي ما يتلون واحدة ، لكنها تتضخم بالحالات غير الطبيعية

* If you find abnormal nodes :

ارجع لـ SPACE SPIT * عند البدء ابدأ بالخطوات

الرئيسية للـ physical. E

اماكن واساء الغدد : palpation of the

الرقبة

1) Neck -> Supraclavicular area ->

الرقبة

posterior neck -> axilla -> epitrochlear ->

Inguinal "arm pit"

استخدم كلا اليدين ، وقارن بين كلا الجانبين

افحص الجهة اليمنى بيدك اليسرى والعكس

1. submental

2. submaxilar

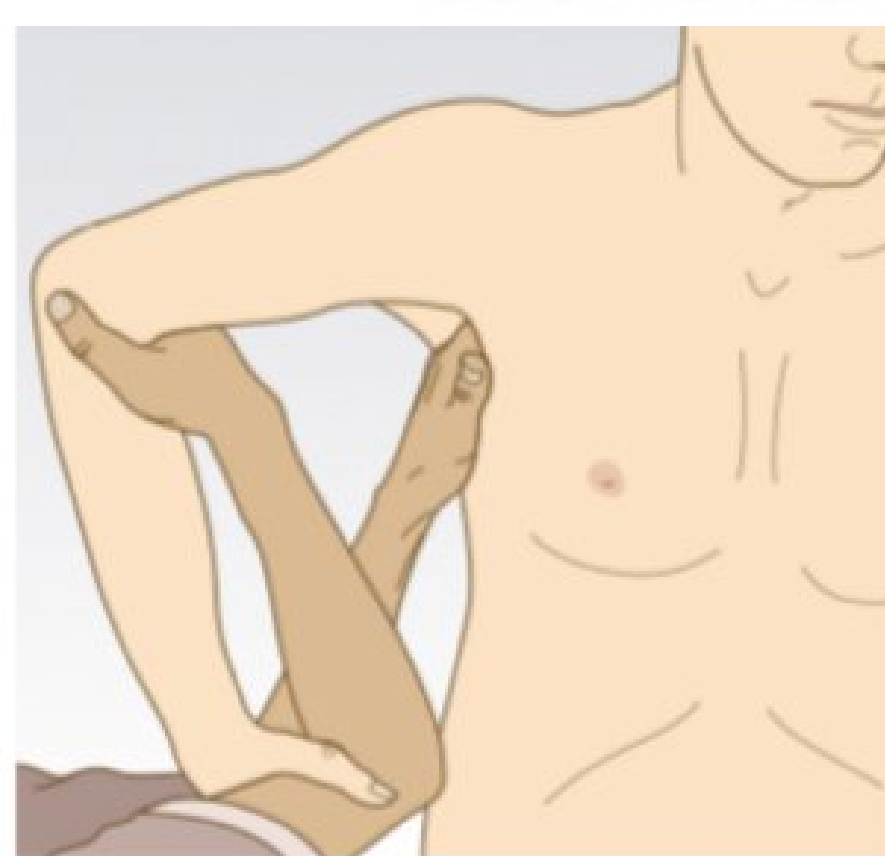
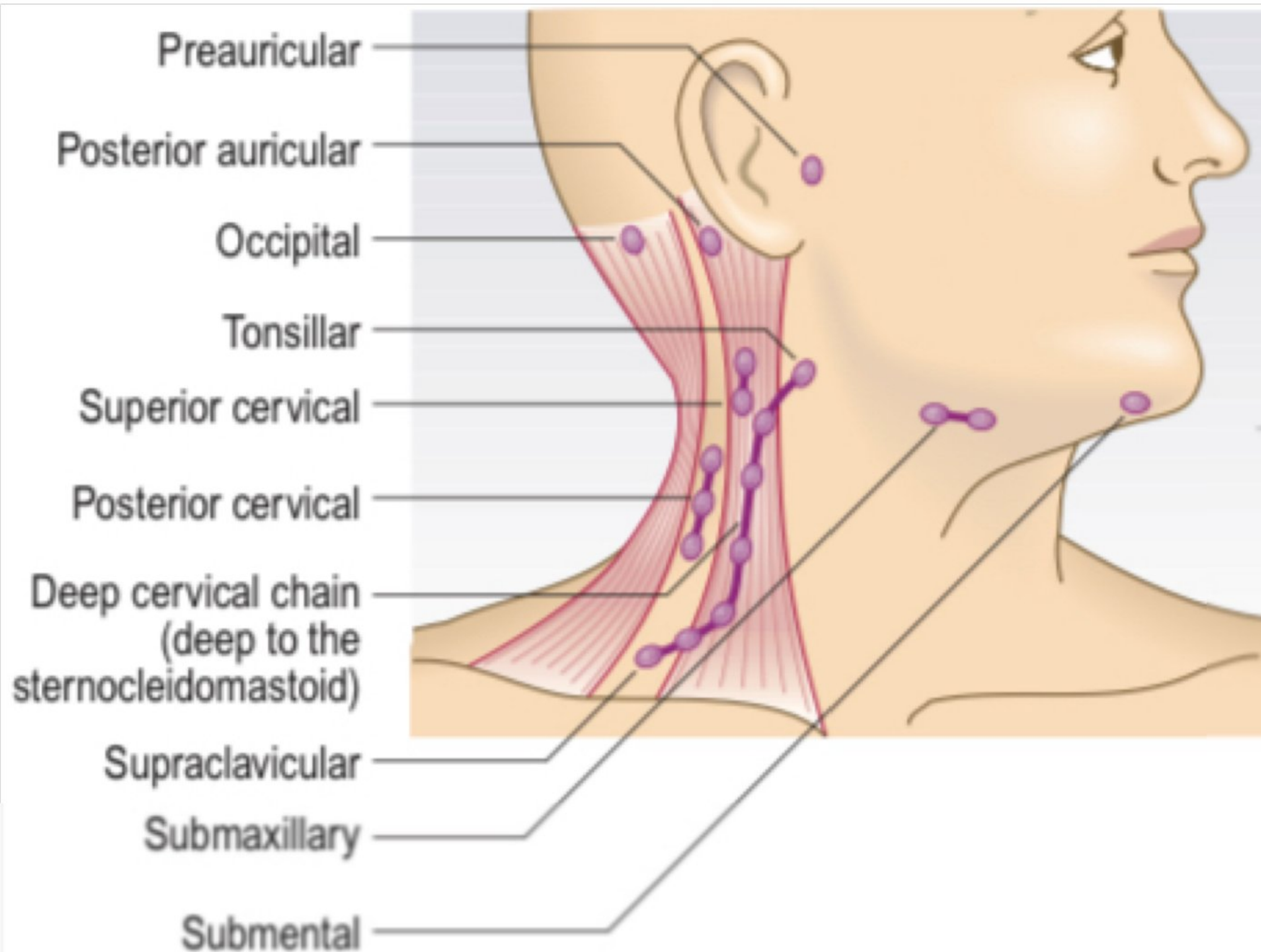
3. Subclavicular

4. preauricular

بعض الأماكن

posterior auricular

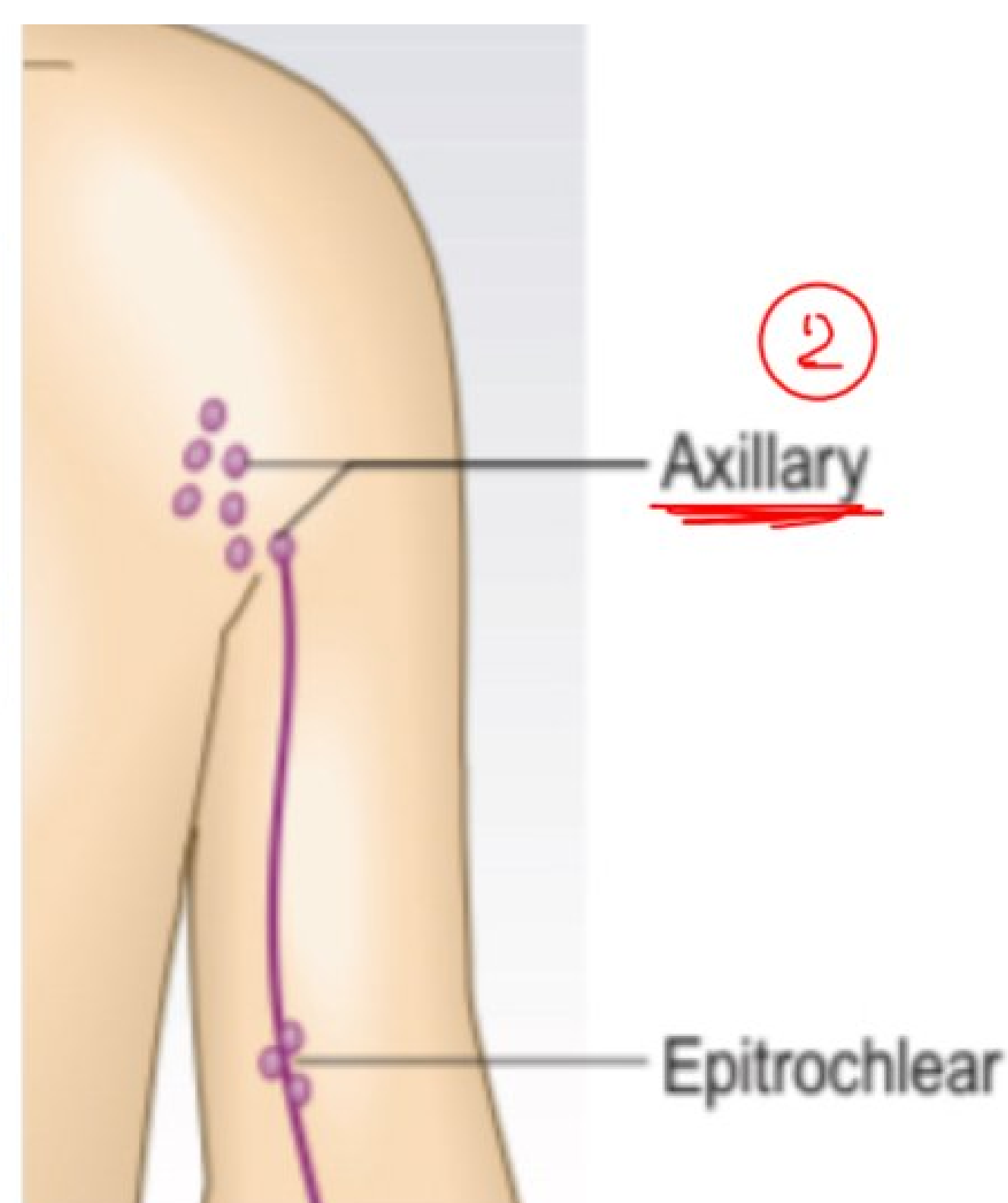
superior cervical



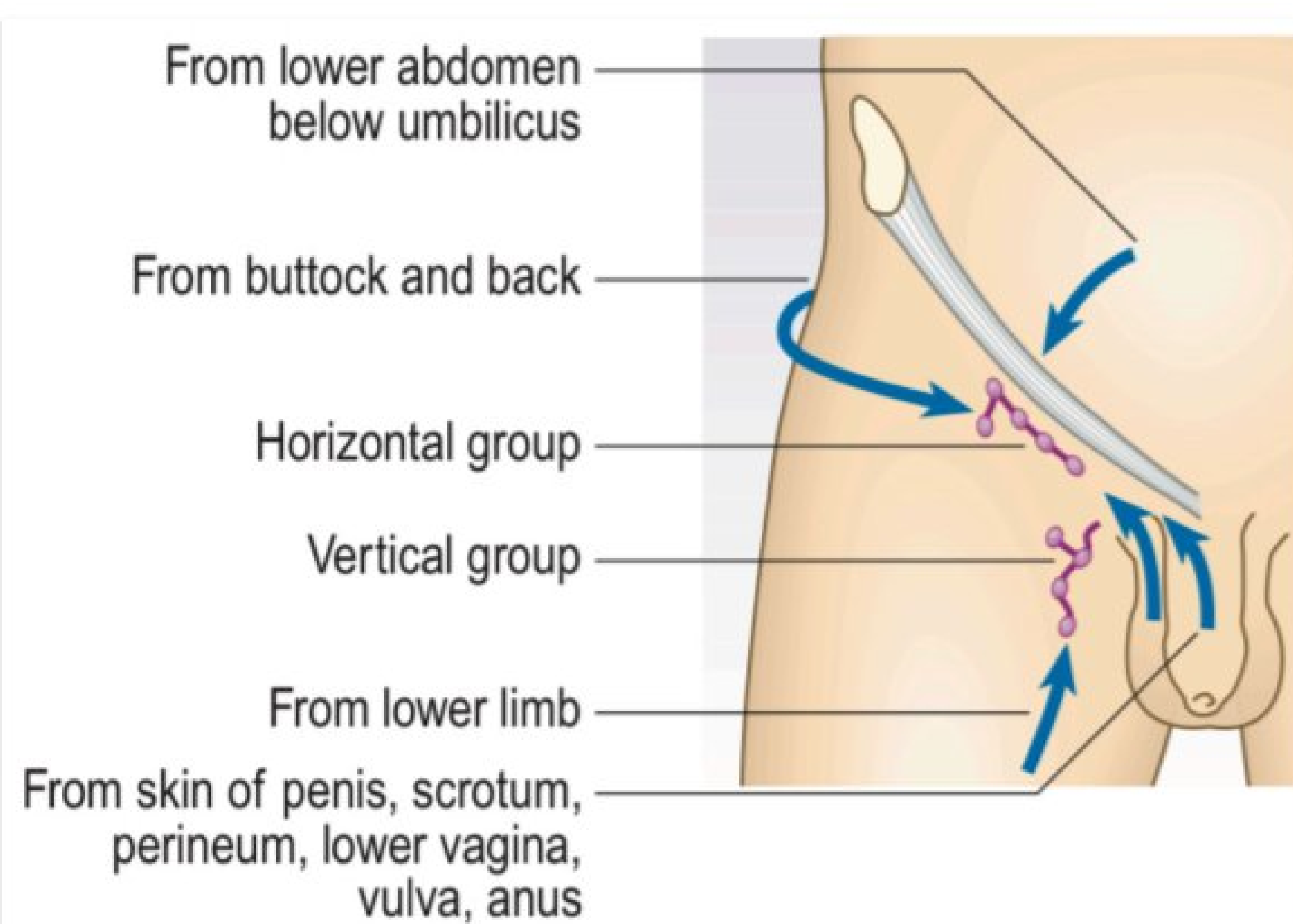
A



B



Palpation of the inguinal glands



• Examination sequence of the lymph nodes

- 1) Inspect for visible lymphadenopathy كيفية القياس - مرتبة
- 2) palpate one side at a time using the fingers of each hand in turn. استخدم اصابع يديك، وكل جانب على حدة
- 3) Compare with the nodes on the contralateral side. قارن ←
- 4) Assess : site • size ↓
- 5) Determine whether the node is fixed to:
 - surrounding and deep structure لتأبته في
 - skin طرد
- 6) Check consistency التحقق من الاتساق
 - Is it abscessed or enlarged because of an infection التهاب
- 7) Check for tenderness. يرفق وحان →