

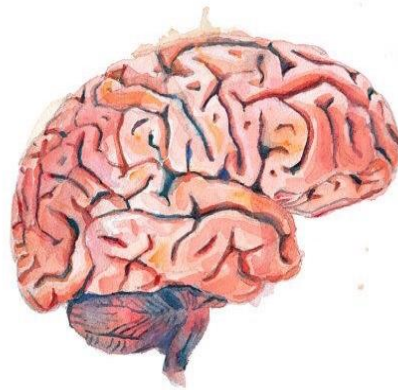


MED437  
KING SAUD UNIVERSITY



# *Clinical Skills*

## *CNS*



### **Neurological Examination**

### **Sensory Examination**



- ❖ Color index :
- Notes
  - Important
  - Slides
  - Extra
  - Words meanings








For your questions, comments and ideas:

Email: [OSCE.Team437@gmail.com](mailto:OSCE.Team437@gmail.com)  
Twitter: [@OSCE\\_Team437](https://twitter.com/OSCE_Team437)

# Objectives and materials:

**OBJECTIVE:** To conduct a complete Sensory Examination as a part of Neurological Examination.

**MATERIALS:** Well illuminated examination room, examination table. (the rest are going to be explained with pics)

Tendon hammer	Penlight	Ophthalmoscope	Tuning fork
			
Clean gloves	Pins and needles	Piece of cotton wool	Brush
			

Actually, you can skip this page :)

## Preparation

- 1- Introduce yourself to the patient.
- 2- Confirm patient's ID.
- 3- Explain the procedure and reassure the patient.
- 4- **Get patient's consent.**
- 5- Wash hands.
- 6- Prepare the necessary materials.
- 7- Show the patient each object and allow him/her to touch the pin/needle, brush and cotton prior to beginning the exam to reduce any fear of being hurt during the examination.
- 8- Position the patient in a **lying or sitting** position and uncover arms and legs.

Good morning I'm ...(your name)... I'm a second year medical student<sup>1</sup>. Can you tell me your name and give me your ID please<sup>2</sup>? Okay ...(patient name)... today I'm here to perform a sensory examination<sup>3</sup> "that may include ....." , is that okay with you<sup>4</sup>? Before I start I should wash my hands<sup>5</sup> and prepare the materials<sup>6</sup> if you want you can see the materials<sup>7</sup>. I just want you to "sit or lie down" and expose your arms and legs to begin the examination<sup>8</sup>.

## Examination

**Examination** Doctor said it's usually **upper limbs** only but in general from proximal to distal

### 9- Pain (pinprick) testing:

- Ask the patient to **close his/her eyes.**
  - Demonstrate to the patient "sharp" and "dull" sensation by touching a normal area (e.g. lower arm) with a new pin/needle and brush.
  - Instruct the patient to say "sharp" or "dull" when they feel the respective object.
  - Begin proximally and apply alternate touching the patient with the needle and the brush at intervals (~5 sec).
  - **Test each dermatome comparing left and right sides.**
- (Make certain to instruct the patient to tell the physician if they notice a difference in the strength of sensation on each side of their body.)

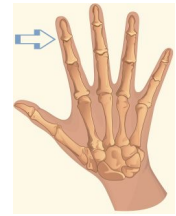
### 10- Light-touch testing:

- Ask the patient to close his/her eyes.
- Instruct the patient to say "yes" when the touch is felt.
- Begin **proximally** and apply touch to the skin of the patient with a wisp of cotton wool.  
(Do not stroke skin because this moves hair fibres).
- **Test each dermatome comparing left and right sides.**

Continues on the next page.....

### 11-Vibration testing:

- Ask the patient to close his/her eyes.
- Place a vibrating 128 Hz tuning fork (not a 256 or 512 Hz fork) on **one distal interphalangeal joints** (NOT on the bone) (patient should be able to describe a feeling of vibration).
- Ask the patient to inform you when the vibration stops.
- Deadend the vibrations of the tuning fork with your hand (patient should be able to say exactly when it occurs).
- Compare one side with the other.



9- okay now I will test your sensation that involve touching you with with a new pin/needle as a “sharp” and brush as a “dull” . I want you to say "sharp" or "dull" when they feel it . Is that okay with you? . Okay but first close your eyes please (remember Test each dermatome comparing left and right sides) .Also I want to tell me if you notice any difference in the strength of sensation on each side of your body. ([Video](#))

10- I will touch you now with wisp of cotton wool and I want you to say "yes" when the touch is felt. But first can close your eyes please (remember Test each dermatome comparing left and right sides). ([Video](#))

11- Now I will test the vibration.Close your eyes please I will put vibrating 128 Hz tuning fork on one of your distal interphalangeal and I want you to inform me when you feel the vibration start and stop (remember Test each side comparing left and right sides). Usually we start testing the distal joints first because if they were damage the proximal joints will be damage too. ([Video](#))

### Preparation:

#### 12- Position sense (Proprioception) testing:

- Ensure that the patient has no problem with interphalangeal joints (e.g. pain, arthritis etc.)
- While holding one of his/her fingers by **its sides**, demonstrate to the patient "up" and "down" sensation by moving one of his/her distal interphalangeal joints.
- Instruct the patient to identify the direction of each movement as "up" or "down".
- Ask the patient to close his/her eyes.
- Apply same movement on different fingers and directions a couple of times.

Now I will test the position sense , first I want to ask you do you have any problem with interphalangeal joints like pain or arthritis ?! ( if it yes be careful or don't do the test )

I will hold one of your fingers and move one of your distal interphalangeal joints "up" or "down" and I want you to tell me the direction of each movement as "up" or "down".

After that we will repeat the test with close eyes.

We hold his/her fingers by its sides because we want to test the patient sensation not his/her pressure. ([Video](#))

## After the examination

29- Ensure that the patient is comfortable.

30- Make explanations to the patient, answer his/her questions and discuss management plan.

31- Dispose of sharps and waste material according to infection control standards.

32- Wash hands.

33- Document the procedure.

After finishing the examination,

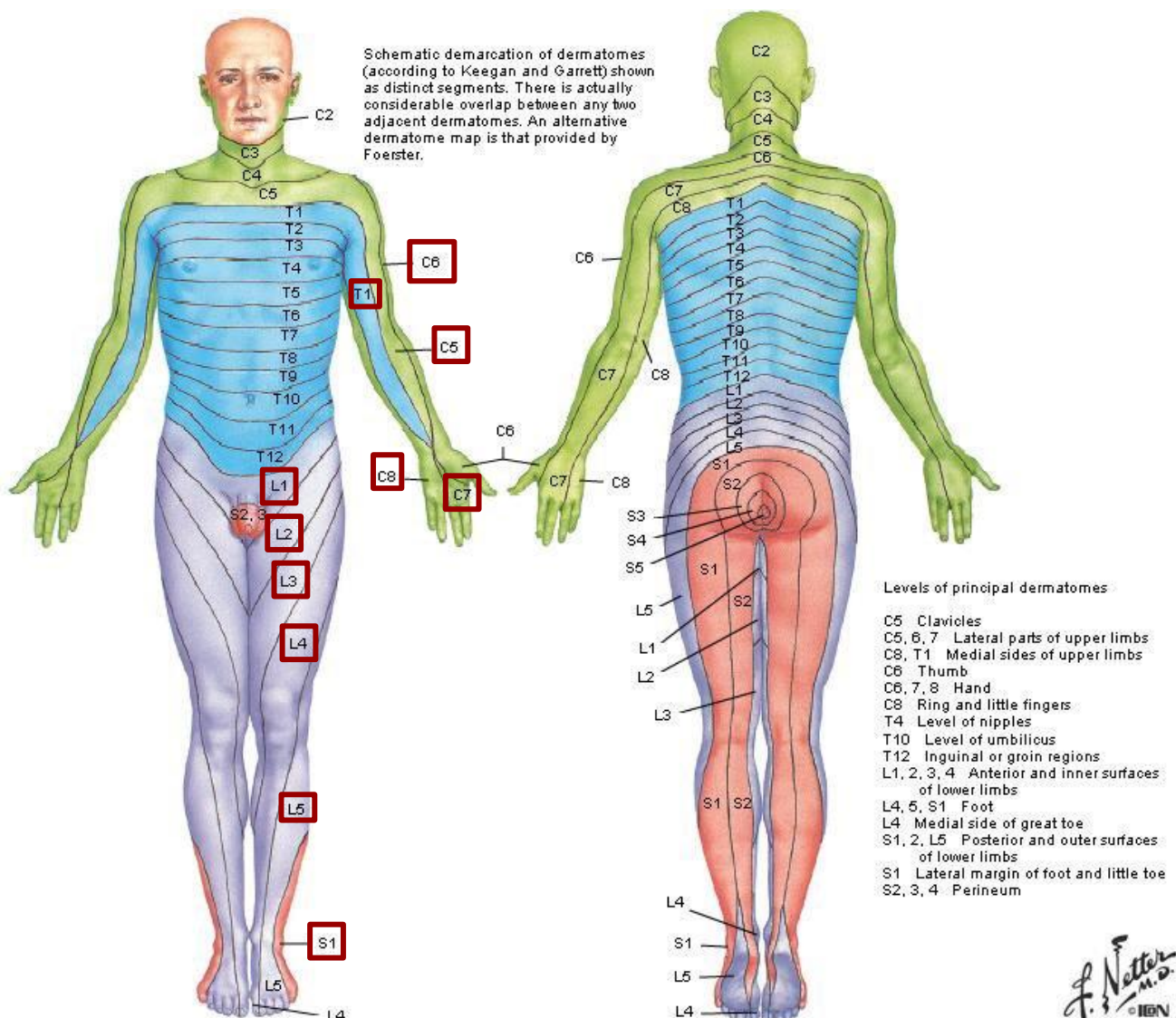
Okay are you comfortable?

Do you have any questions?

“Dispose the wastes” (or just mention it “I should dispose the wastes “)

I'll wash my hands

I'll document the procedure, thank you.



## Videos, pictures and notes:

- After you finish from each test or step inform the doctor about what you notice but usually you're gonna say "normal or the test is negative" bc he's not a real patient
- Don't forget to compare both sides
- Smile, don't stress
- Cut your nails
- Don't forget your stickers
- [Video of sensory examination](#)

Here is a video for the whole presecure:

<https://youtu.be/FgL4hkXTw7U>

# Advice: You have to punch those finals in the face ...

## Leaders :

Renad Alfirm , Ahad Algrain , Zeyad Alkhenizan

## Members :

- Alanoud Alotaiby
- Dimah Alaraifi
- Gharam Julaidan
- Leena Alrahmah
- Renad Alsuellmi
- Shahad Aljebreen
- Ali Alammari
- Abdulelah Aldossari
- Faisal Alsaif
- Fahad Alfaiz
- Abduljabbar Alyamani

