



# Pitting edema assessment

# Head lines

- Definition of edema.
- Definition of pitting edema.
- Pathophysiology .
- Times for assessment of pitting edema during pregnancy.
- Procedure.
- Considerations about edema in pregnancy.

- **Edema;** is abnormal accumulation of body fluids in soft tissues of the skin. It often affects the lower body, such as the legs, feet, and ankles, but it can occur anywhere.

# Types of edema

## *Edema*



Pitting edema



Non-pitting edema

# pitting edema

- It is type of edema when press on it,itcause indentation that stay for some time after release of the pressure.
- It's abnormal condition , but it's common in the pregnancy.



# *Causes of edema in pregnancy*

1

- Fluid retention.

2

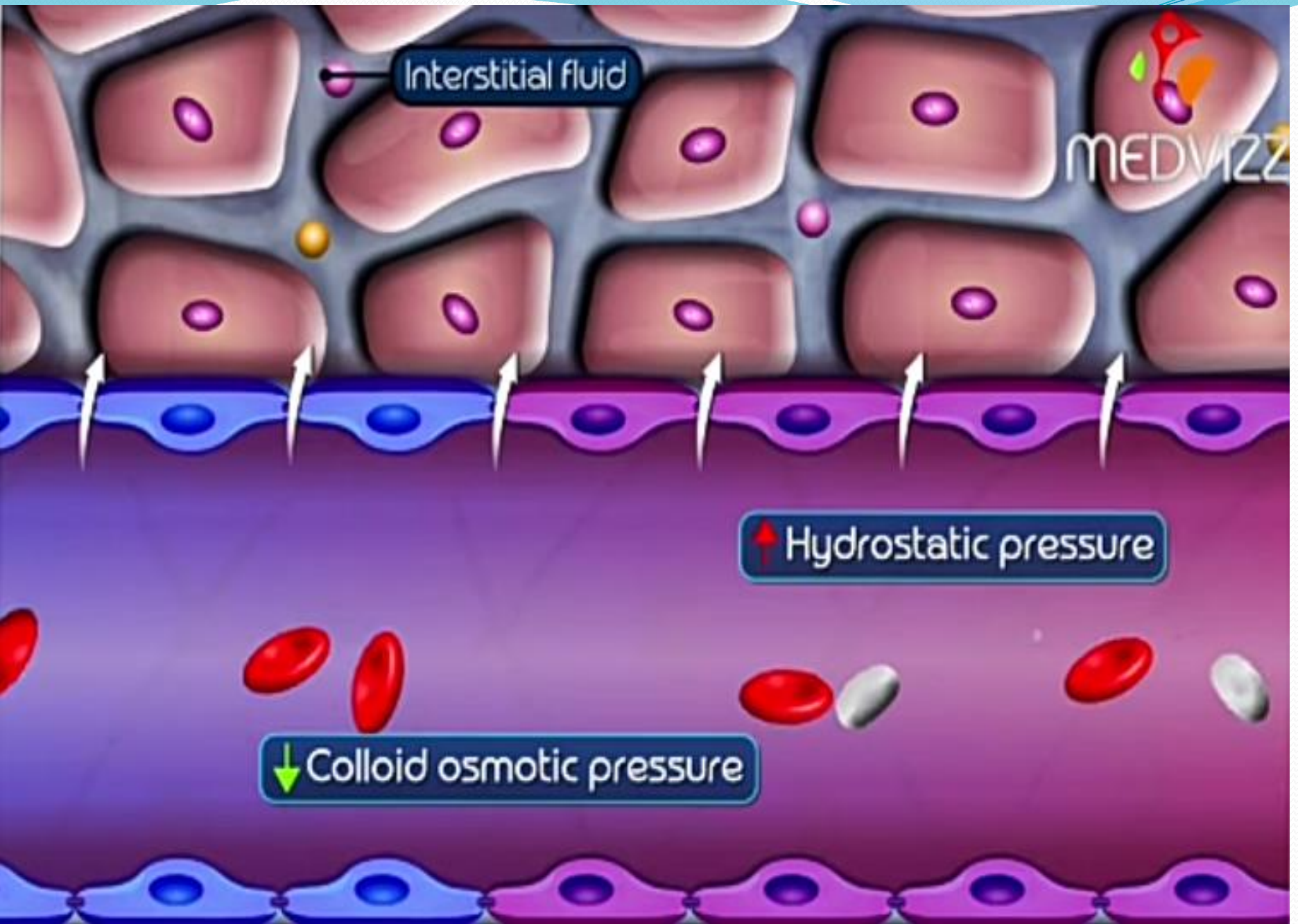
- Changing in hormones that soft veins.

3

- Growing of fetus that cause pressure on pelvis and legs.

# *pathophysiology*

- *During pregnancy fluids and blood volume increased 50% .*
- *↑↑ capillary hydrostatic pressure.*
- *↓↓plasma oncotic pressure.*
- *↑↑capillary permeability*
- *Fluids shifts from intravascular to interstitial space causing swelling.*



Interstitial fluid

MEDVIZZ

↑ Hydrostatic pressure

↓ Colloid osmotic pressure



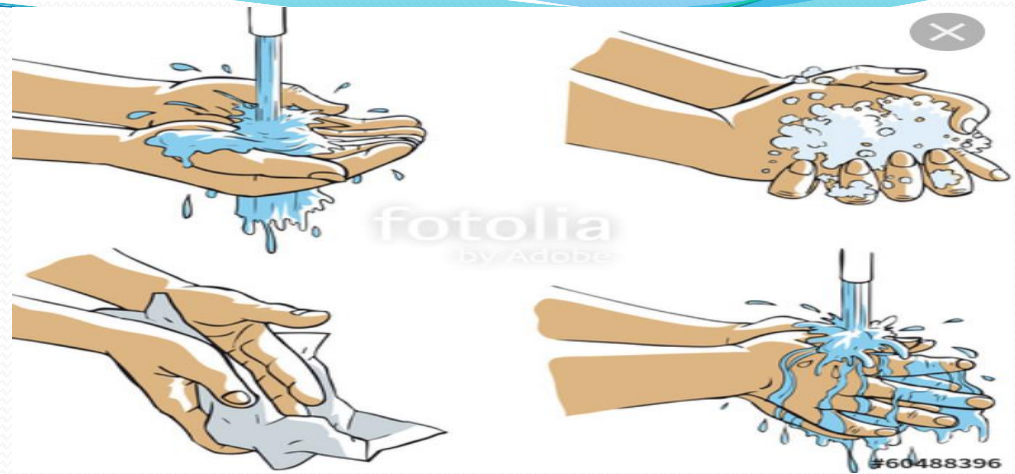
## **Times for assessment of pitting edema during pregnancy**

- Edema should be assessed routinely at each prenatal visit after 20 weeks of gestation.

An illustration of two human legs from the knees down, encased in a light brown, textured cast. The feet are visible at the bottom, showing toes and some hair. The illustration is centered on a white background with a blue wavy border at the top. The text 'Procedure steps' is overlaid in a large, dark blue, italicized font.

# *Procedure steps*

□ Hand washing



□ Greeting the mother

□ Explain the procedure



# □ Position the mother flat in bed

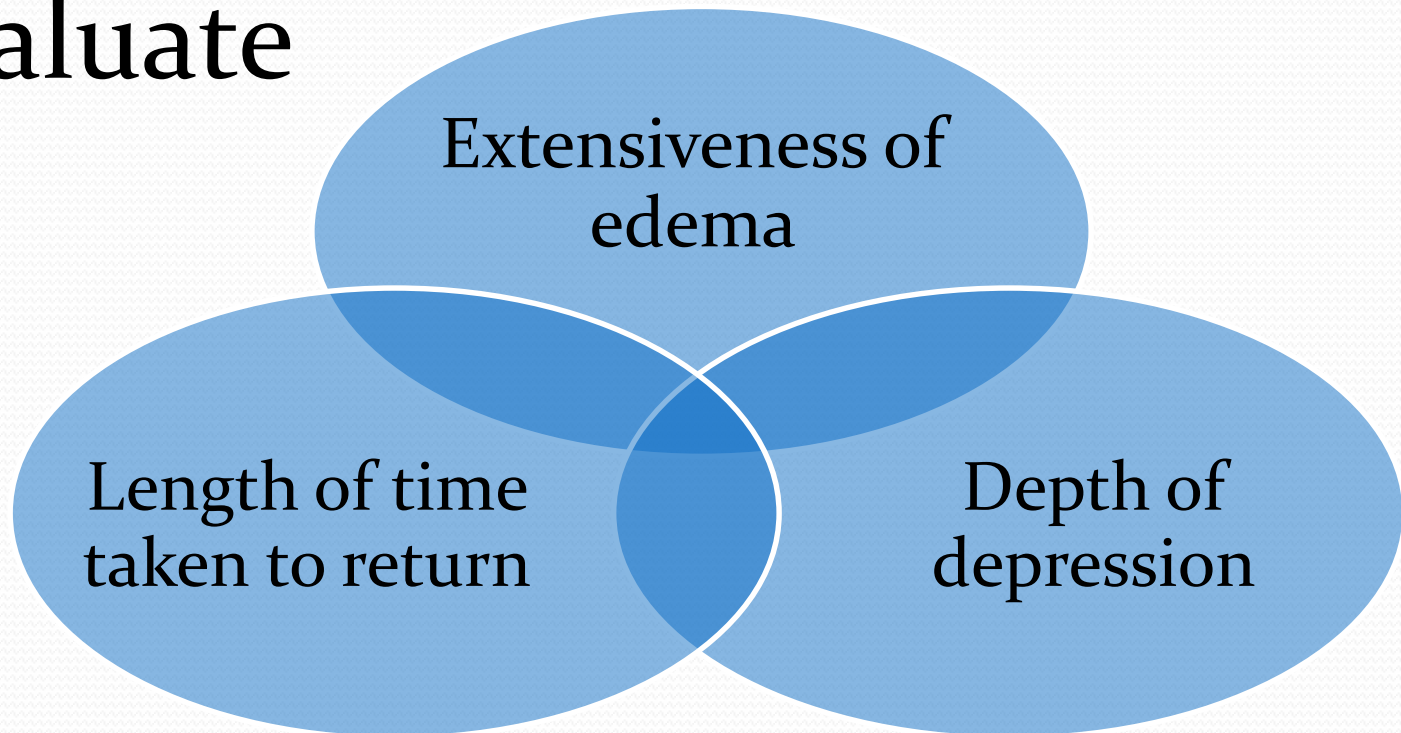


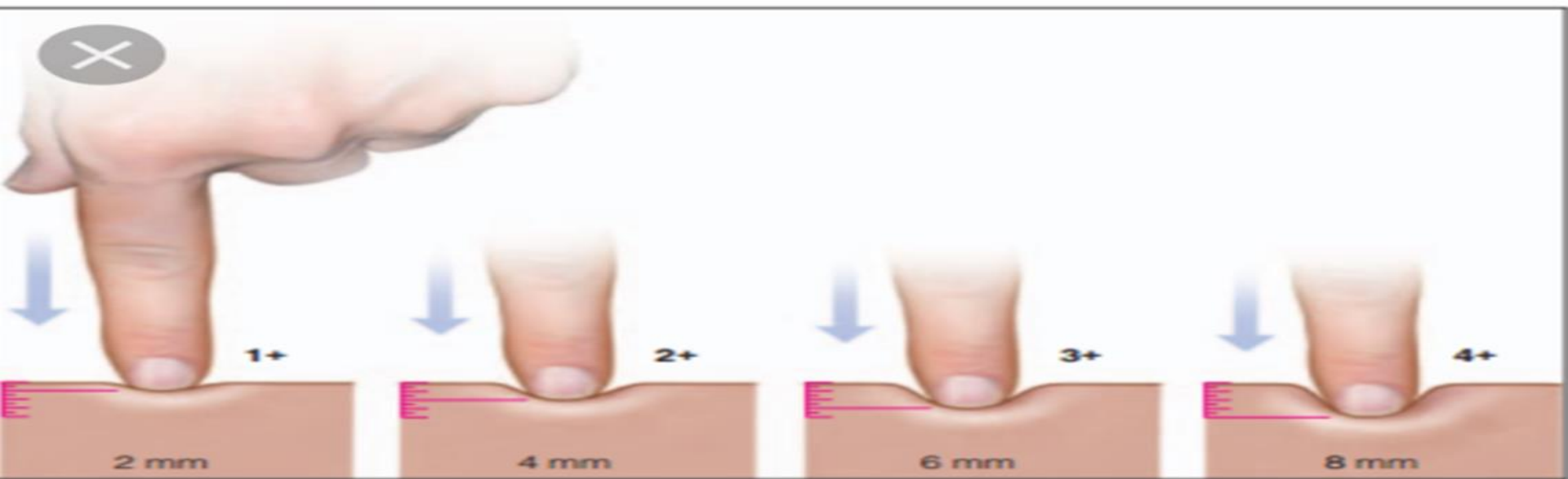
- ❑ Observe for general appearance (skin texture, Swelling).
- ❑ Inspect the woman ( face, extremities, and sacral area ) for signs of pitting edema.




- ❑ Press each area firmly with the thumb or index finger for about 15 seconds and release

## ❑ Evaluate





grade	depth	Rebound time
1	2mm minimal Lower limbs, barely visible	immediate
2	4mm slightly indentation(marked)lower limbs	Few seconds to rebound
3	6mm. deep indentation (legs,hands,face)	10-12 second
4	8mm .generalized ,massive edema	>20 second

- 
- Record and compare the finding with those previously recorded
  - Cover the woman and keep there in comfortable position



A little bit of mild swelling  
is normal during pregnancy



# Health education

- ❖ Assess the feet routinely.
- ❖ Avoid standing for long time.
- ❖ Rest the feet elevated.
- ❖ Wear comfortable shoes, avoid high heels.
- ❖ Low salt diet.
- ❖ Use cold compresses on swollen areas.



# Alarm signs

- ❖ **More swelling in the hands.**
- ❖ **Puffiness of the eyes.**
- ❖ **Swelling in the face.**
- ❖ **Excessive or sudden swelling in feet and ankles.**
- ❖ **If one leg is swollen than the other.**

# Life threatening condition



**THANK YOU**

