

I.3. Demonstration of ossification centres of sternum & foot

Gross:

- Sternum has 1 ossification centre for manubrium sterni, & 4 ossification centers for body of sternum and xiphoid process has not appeared.
- In foot calcaneum (5th moth IUL) & talus ossification (7th month IUL) centres are appeared.
- From this we can say the age of the foetus i.e. 10 months of IUL.



Dissection of Sternum:

- It is placed flat on a wooden board and cut with the cartilage knife in its long axis in midline.

There are 6 ossification centres for sternum

Appearance	Union
Manubrium sterni – 5 th month of IUL	<div style="font-size: 3em; color: blue; margin-left: 10px;">}</div> 14 to 25 years from below
1 st body of sternum – 5 th Month of IUL	
2 nd body of sternum – 7 th month IUL	
3 rd body of sternum – 7 th month IUL	
4 th body of sternum – 10 th month IUL	
Xiphoid process – 3 rd year	40 years

Body of sternum unites with manubrium sternum at the age of 60 years.

Medicolegal importance:

Useful in estimating the Age of the foetus.

Dissection of Foot:

- The foot is grasped in the left hand behind the heel, the toes pointing towards the dissector.
- An incision is made between the interspace of third and fourth toes with a long knife, backwards through the sole of the foot and heel.
- If centre in calcaneum and talus are not exposed, thin slices of cartilage of these bones should be cut until the presence or absence has been shown.
- **Calcaneum appears at 5th and in talus at 7th month of intrauterine life.**
- A centre may be present in **cuboid at birth**, or it may appear shortly afterwards.