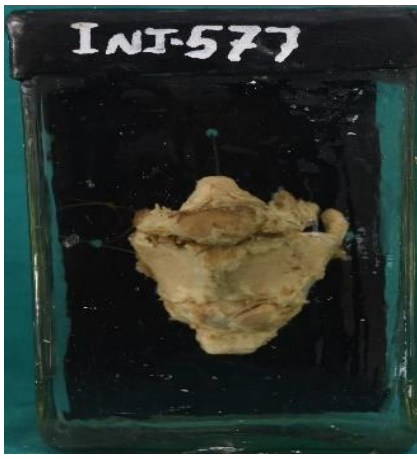

M.I.10. Hyoid bone & thyroid cartilage

Gross

- Given specimen shows hyoid bone which has body and 2 cornu &

also shows thyroid cartilage

Inward (side-wise) Compression Fractures:

- They are seen in cases of throttling, the greater cornu of hyoid are compressed inwards causing fracture of the bone with tear of its periosteum on the outer side and not on the inner side, displacing the posterior fragment inwards
- **Demonstration:** If the body of hyoid is grasped in one hand, and the distal fragment between the finger and thumb of the other hand, the distal fragment can be easily bent in inward direction, but outward movement is limited to normal position only.

Antero-posterior Compression Fractures:

- It is seen in hanging; due to anteroposterior compression, hyoid bone is driven directly backward, divergence of greater cornu is increased causing fracture with outward displacement of posterior small fragment.
- As a result, periosteum on inner side of fracture is torn when the fragment can be easily moved outwards, but inner movement is limited to normal position only.
- They are also seen in ligature strangulation, run over motor vehicle accident and blows on front of neck by any means, e.g., rods, foot or stick.

Avulsion or Traction or Tug Fracture

- It occurs due to hyperextension of the neck or muscular over-activity, as result of traction on thyrohyoid ligament either by downward or lateral compression or when direct pressure is exerted between hyoid and thyroid by pressing fingers.
- The hyoid is drawn upwards and held rigid

Medicolegal importance:

- Chronic alcoholics are predisposed to hyoid fracture.
- Fractures of the hyoid can also be seen in natural deaths, presumably from intense muscle contractions during the agonal stages or following violent coughing