**SNS COLLEGE OF ALLIED HEALTH SCIENCES**

SNS Kalvi Nagar, Coimbatore - 35

Affiliated to Dr MGR Medical University, Chennai

**DEPARTMENT :** PHYSICIAN ASSISTANT

**COURSE NAME :** ORTHOPAEDIC

**UNIT :** CONGENITAL MALFORMATIONS

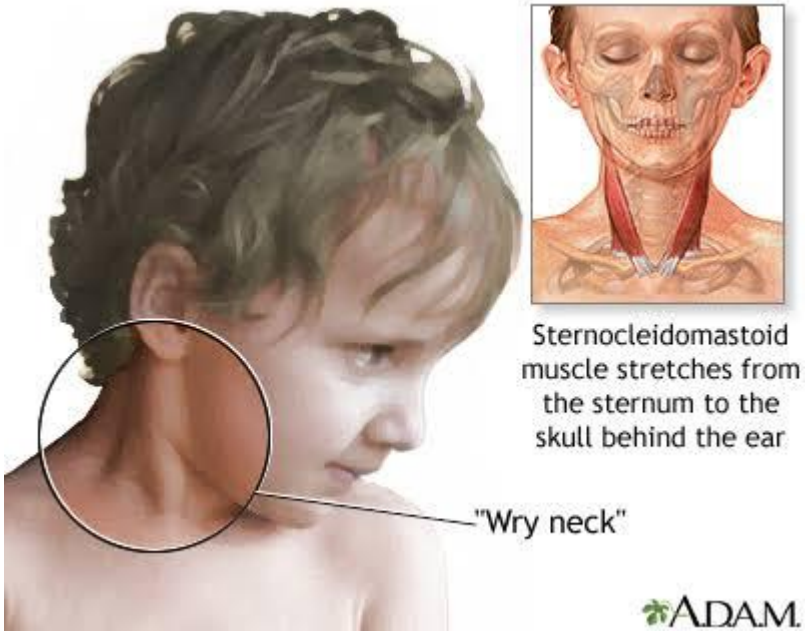
**TOPICS :** INFANTILE TORTICOLLIS

## REFERED FROM:

ADAMS'S OUTLINE OF ORTHOPAEDICS.

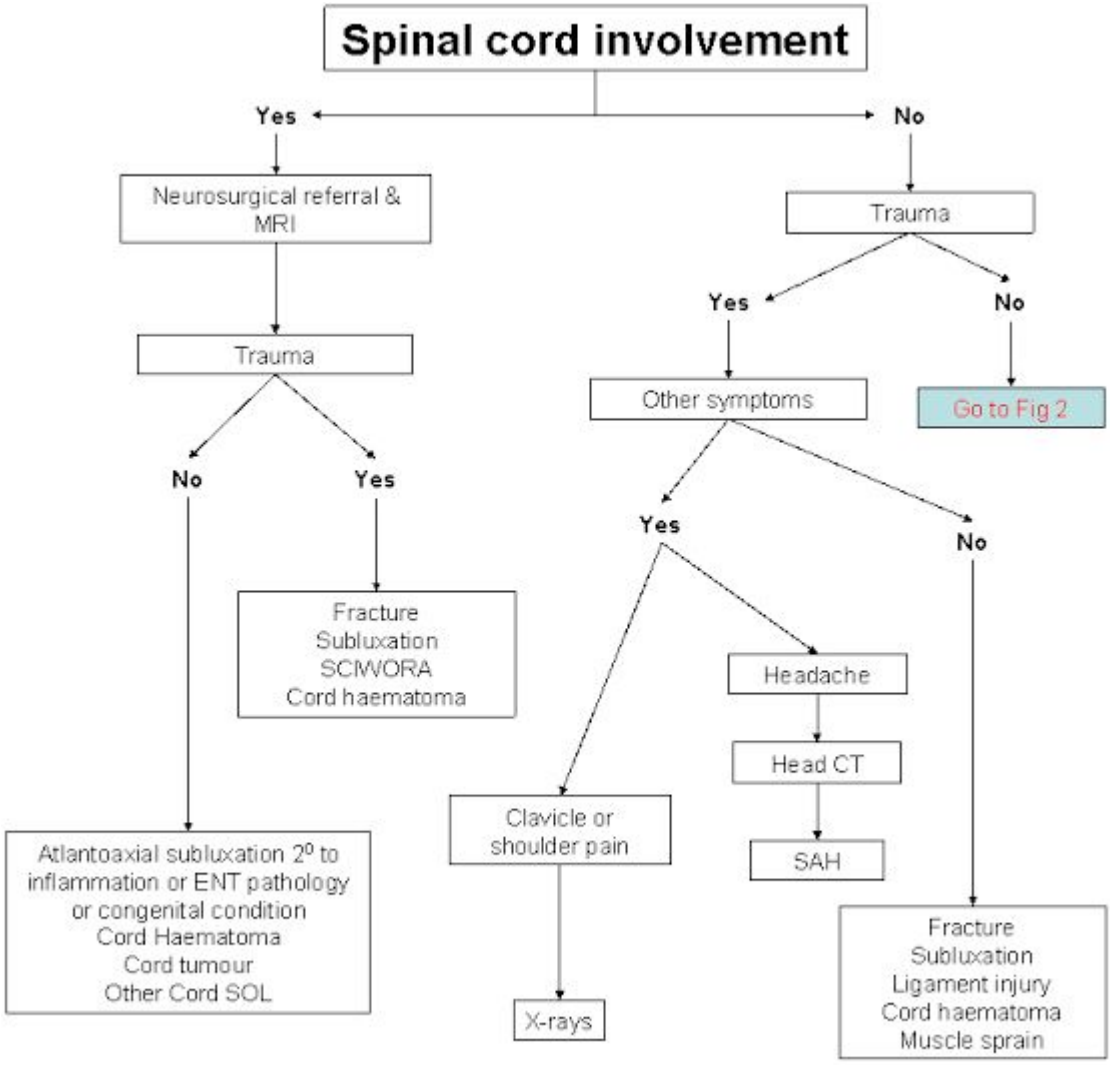
## DEFINITION:

- Infantile Tortcollis is also called Congenital Tortcollis or Muscular Tortcollis or wry neck.
- In infantile Tortcollis the head is tilted and rotated by contracture of the sternomastoid muscle of one side.
- Strictly this is not a true congenital deformity because it arises after birth.
- With improvement in obstetrical practice it is now seen much less often than it was in the past.


Sternocleidomastoid muscle stretches from the sternum to the skull behind the ear
"Wry neck"
A.D.A.M.

## Causes:

- Exact cause is unknown.
- Interference with the blood supply of the sternomastoid muscle, caused by injury during birth .
- Neuro developmental delay.
- Comorbidities



**Risk factor**

- Ischemia
- Trauma during childbirth
- Intrauterine malposition
- Crowding in uterus or birth canal

# Pathology

- In the established condition, part of the affected muscle is replaced by contracted fibrous tissue.
- In some cases contracture is known to have been preceded ,in early infancy,by a tumour like thickening of muscle (sternomastoid tumour) , the histology of being that' of muscle infarction and replacement by fibrous tissue.

## Clinical manifestations:

- The child between 6 months and 3 years is noticed to hold the head on side
- The ear on affected side is approximated to the corresponding shoulder.
- Retarded development of the face.
- Assymetry of the face.
- Troubling in moving head

- Turning on baby chin towards the opposite side of the head
- Firm,small , lump in the middle of the neck muscle
- Baby  head is flat on one side

## Diagnosis:

- History collection - birth trauma, condition of sternomastoid muscle
- Physical Examination - facial represention
- Xray- spine
- CT scan
- MRI( rule out vertebral anomalies)

## Management:

**Physical therapy:**

To correct the deformity by release of the contracted soft tissue and to maintain correction by suitable exercise regime, avoiding recurrence.

**Physiotherapy:**

Evaluation(ROMand degree of deformity), massage(relax muscle preceding),thermo therapy modality , passive movements (attain relaxation, maintain correction).

## Surgical management:

- Subcutaneous tenotomy,open tenotomy, bipolar tenotomy(treat pain' in tendon, remove a piece of tendon through small incision -tenotomy)
- Radical resection of a sternomastoid

# Thank you