

(EP05.01). Coronal plane clues: insights into Sprengel shoulder

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Case Report : Sprengel shoulder is a rare congenital anomaly characterized by hypoplastic elevated scapula, sometimes associated with an omovertebral bone and scoliosis. It is associated with cosmetic deformity and abnormal shoulder function. Evaluation of cervical spine in coronal plane helps assessing cervical vertebrae with add on imaging of scapulae, clavicles, curvature abnormalities and ribs. Presenting two cases of Sprengel shoulder detected during routine anomaly scan. We highlight the fact that this anomaly was suspected on imaging the cervical spine on the coronal plane which was added into the protocol in addition to axial and sagittal planes of imaging of spine during routine anomaly scan. Both cases showed superior elevation of unilateral scapula (affected left scapula) with medial orientation towards cervical spine (Fig 1). Associated cervical hemivertebrae (Fig 2) and crowding of ribs (Fig 3) on the effected side was appreciated best on the coronal plane. The axial view of the cervical spine showed only one scapula under view on the effected side against normal where we see bilateral scapulae. Linear accessory ossicle (omovertebral bone) measuring 4-5 mm was observed in subcutaneous plane extending from lower cervical vertebra towards scapula on the affected side (Fig 4). Increased awareness and systematic use of the coronal imaging plane of fetal spine allows better visualization of the position, symmetry and vertical alignment of both scapulae. This plane also helps assess associated abnormalities involving the ribs. Early prenatal recognition facilitates appropriate parental counselling, and assists in planning postnatal orthopedic management.

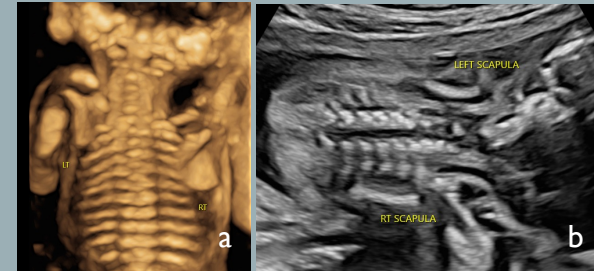


Fig 1. Superior elevation of unilateral scapula (affected scapula) with medial orientation towards cervical spine seen on 3D and 2D (a, b).

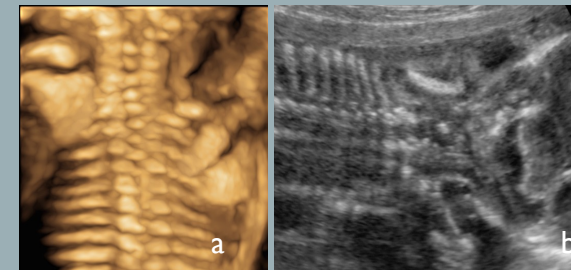


Fig 2. Segmentation anomaly cervical spine on 3D and 2D (a, b).



Fig 3. Crowding of ribs seen on the effected side (arrow)

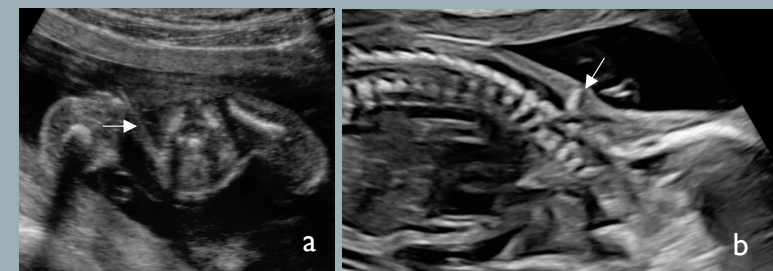


Fig4. A linear accessory ossicle (omovertebral bone) observed in subcutaneous plane (arrow) extending from lower cervical vertebra towards scapula on the affected side (a, b).