# Where is my ear? - Cervical tragus with microtia

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### Abstract

The human pinna develops from six 'Hillocks of His'. Any abnormality during development in formation or migration of these hillocks may lead to various pinna deformities. We present here an interesting clinical image of tragus of pinna arising from cervical region.

# Title Page

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 ${\bf Keywords}$ 

Cervical tragus; Pinna development; Microtia; External ear abnormality

Key Clinical Message

Any significant pinna deformity like cervical tragus may impact not only hearing and speech and but also social development of child if not corrected on time. Hence, it is important for any physician to diagnose it clinically without any delay.

## **Description:**

A 6-year-old boy presented with absence of pinna on left side since birth. There was a skin appendage arising from neck on left side which was firm on deep palpation (Figure 1). A rudimentary cartilage was palpated in the region of helix (Figure 2). Rest of the cartilaginous framework and external auditory canal opening was absent on left side. Magnetic resonance imaging of neck did not reveal any cyst/sinus/fistula. A clinical diagnosis of left sided cervical tragus with microtia was made.

Development of pinna begins at 6th week of gestation with formation of 6 cartilaginous tubercles called 'Hillocks of His'. First 3 hillocks arise from the 1st and the rest 3 arise from the 2nd Branchial arch that surround first pharyngeal groove. Evidence from human developmental disorders suggests that tragus is derived from the first otic hillock of the first arch [1]. The developing pinna is initially located in the neck and it ascends to normal adult location and configuration by 20th week of gestation [2]. Defect in fusion of hillocks and failure of migration can result in anomalous persistence of rudimentary pinna structures at birth in the region of external ear or in the neck as in this case.

#### **Author Contribution**

SK: Drafting of the manuscript

AA: Literature search and revising the manuscript

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## Figure legends

Figure 1: Frontal view showing a skin appendage arising from neck on left side (red arrow)

Figure 2: Lateral view showing cervical tragus (red circle) and a rudimentary cartilaginous structure buried under skin in region of helix on left side (blue arrow)



