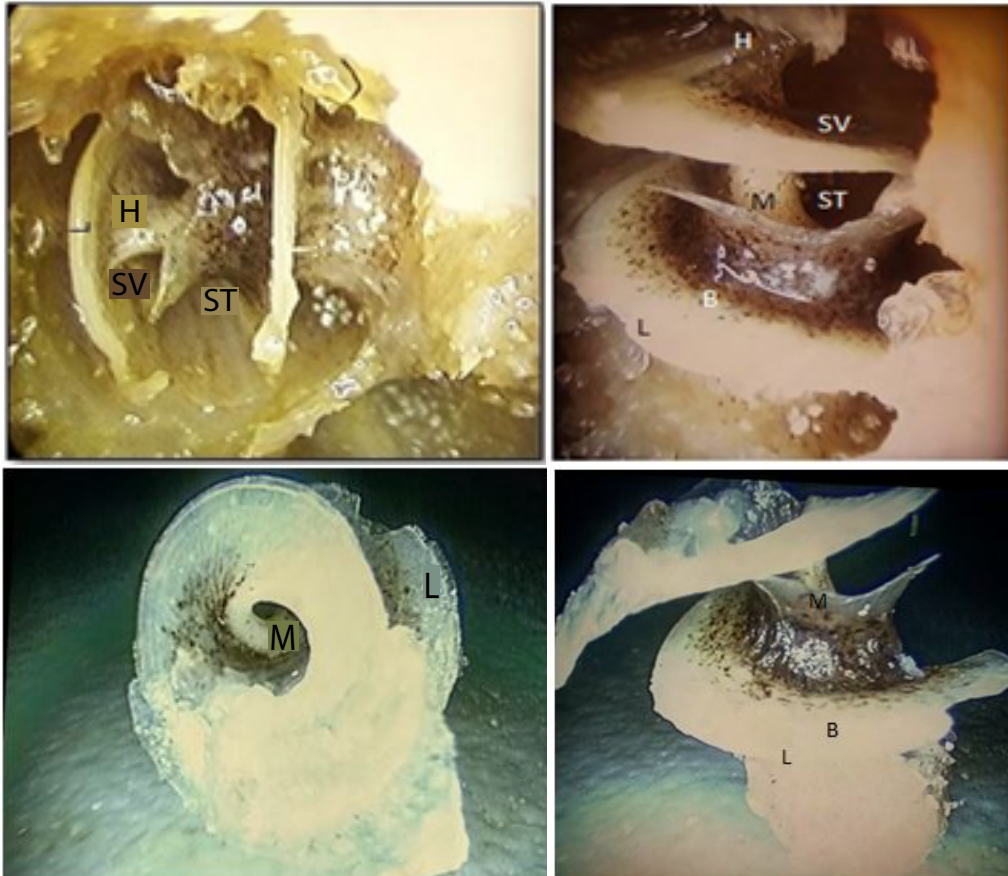


Clinica-Medical Image

## The Human Cochlea

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**Figure 1:** Endoscopic image of the cochlea during cadaveric dissection of the human temporal bone showing: Lamina spiralis ossea (L)—A thin plate of bone spiralling around the Modiolus, giving attachment to basilar membrane and dividing the bony cochlear tube into three compartments: The Scala Tympani (ST) and the Scala Vestibuli (SV). Helicotrema (H)—The part of the cochlear labyrinth where the Scala vestibuli and scala tympani fuse.

**Figure 2:** Endoscopic image of the cochlea during cadaveric dissection of the human temporal bone showing: Modiolus (M)—The central pyramid of bone around which the cochlea forms, it transmits vessels and nerves to the cochlea (Lamina spiralis ossea (L), Helicotrema (H), Basilar membrane (B), Scala Tympani (ST), Scala Vestibuli (SV)).

**Figure 3:** Endoscopic image of the cochlea during cadaveric dissection of the human temporal bone showing the Modiolus (M) and the Lamina spiralis ossea (L).

**Figure 4:** Endoscopic image of the cochlea during cadaveric dissection of the human temporal bone showing the Modiolus (M) and the Lamina spiralis ossea (L) and the Basilar membrane (B).

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## **Keywords**

Cochlea; Otology; Anatomy

## **Clinical Image**

The Human Cochlea: The beauty is in the details. With the advent of endoscopes and high definition camera system in otology, now a detailed, panoramic, wide angled view can be captured. This allows the surgeon to look around the corners, even with a zero degree endoscope as compared to the microscope which provided a limited view during transcanal procedures. The Cochlea as seen through a rigid Hopkins rod endoscope, 4 mm in diameter, zero degree with a high definition, 3-chip camera used in two handed endoscopic ear surgery human cadaveric temporal bone dissection at Sushrut ENT Hospital and Dr Khan's research centre, Talegaon-D, Pune, India. The images have been captured from various angles using an endoscope-camera assembly, showing the detailed structural anatomy of the human cochlea (Figures 1-4).