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# Normal and pathological findings for the facial nerve on magnetic resonance imaging.

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## Source

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## **Abstract**

#### AIM:

To demonstrate the enhanced radiological anatomy and common **pathological** conditions of the **facial nerve** by using **magnetic resonance imaging** (MRI).

### **MATERIALS AND METHODS:**

A retrospective review of the MRI **findings** of the **facial nerve** of 146 patients who visited a tertiary academic referral center was conducted.

## **RESULTS:**

The radiological anatomy of the **facial nerve** was well illustrated using MRI, as were most of the common **pathological** conditions of the **facial nerve**.

## **CONCLUSIONS:**

Enhancement of the **facial nerve** in MRI should be correlated with the clinical data. **Normal** individuals can show enhancement of the tympanic or vertical segments of the **facial nerve**. Enhancement of the labyrinthine portion of the **nerve** is almost diagnostic of Bell's palsy. No specific enhancement patterns were observed for tumours or for infections of the middle or external ear. A larger population study is required for the accurate assessment of **facial nerve** enhancement in multiple sclerosis patients