

A 43-year-old man presented with
left carotid dissection and left
facial weakness and pronator drift

Teaching NeuroImages

Neurology[®]

Resident and Fellow Section

Presentation

- A 43-year-old man presented with left carotid dissection.
- Examination showed left-sided Horner's, left facial weakness and left pronator drift.
- MRI brain showed a small isolated left frontal infarct (Figure 1) with non-decussating corticospinal tracts on diffusion tensor imaging (Figure 2).

Imaging

Figure 1

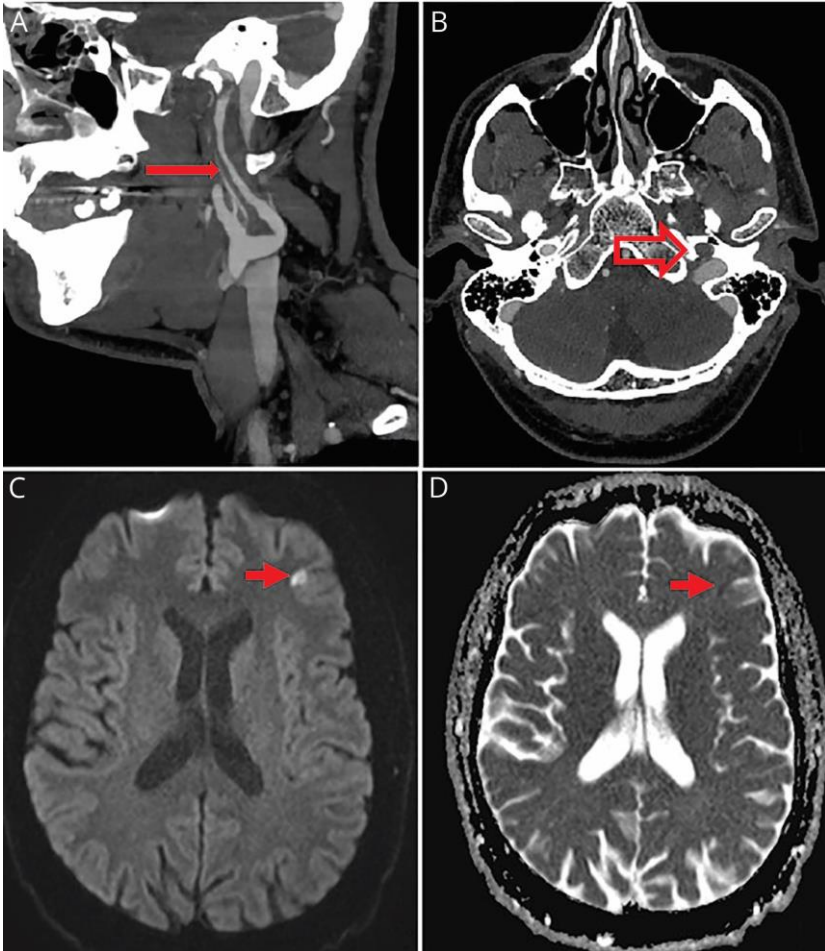
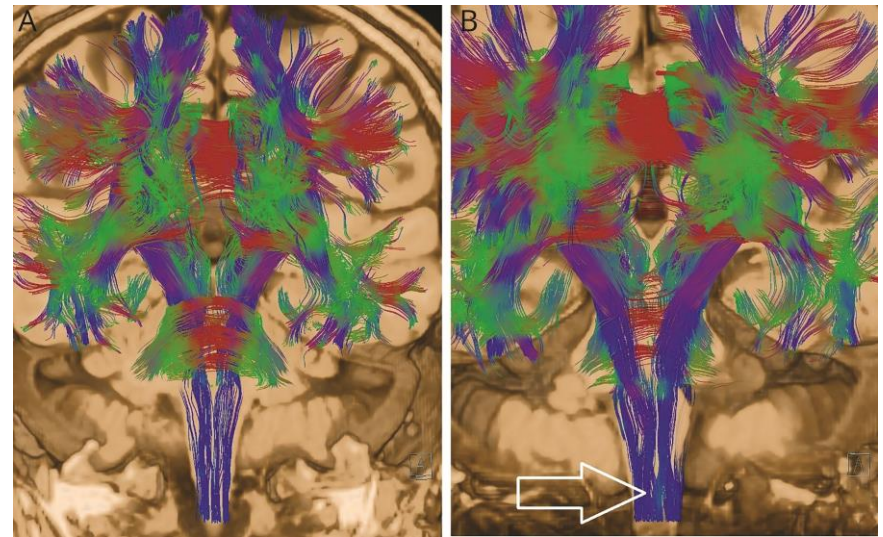


Figure 2



Straight Forward: Stroke with Non-decussating Corticospinal Tracts Causing Ipsilateral Weakness

- Several congenital syndromes are associated with non-decussating tracts and mirror movements.¹
- The prevalence of non-decussating corticospinal tracts in the general population is unknown.
- Ipsilateral hemiparesis is also reported with previous contralateral infarcts and is thought to be secondary to disruption of compensating normal uncrossed corticospinal fibres.²
- This patient has no baseline impairment and demonstrates non-decussating tracts as an anatomical variant.