Carpal tunnel syndrome in association with congenital anomalies.
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**Background** – surgical treatment of carpal tunnel syndrome (CTS) in association with congenital anomalies has been infrequently described. We present two cases.

**Case 1:** 19 year old female with right radial dysplasia and hypoplastic thumb, Manske grade IIIA. XR below.

**Case 2:** 64 year old male with bilateral ulnar dysplasia with absent ulnar digital rays in both hands. XR below.

**Carpal Tunnel Release Operative Findings**
In both patients the median nerve and carpal tunnel were located more radial than normal. The ulnar artery and nerve were found more centrally in the proximal palm. The median nerve was adherent to the overlying flexor retinaculum and deep aspect of the thenar muscles. Dense palmar aponeurotic bands compressed the median nerve distal to the carpal tunnel causing an hour-glass constriction of the nerve.

**Discussion:** Our cases highlight the anomalous anatomy that may be found when undertaking carpal tunnel decompression in patients with congenital hand anomalies. This correlates with published reports. It has been suggested that CTS in this scenario may be caused by hypoplastic carpal bones, reducing the size of the carpal tunnel.

**Conclusion:** We advocate brachial plexus block or general anaesthetic for this surgery. The skin incision should enable extension proximal to the wrist to facilitate identification of nerve anatomy. Awareness of this variation allows the hand surgeon to make an appropriate operative plan.