Bilateral radial nerve palsy in a newborn

Figure 1 Bilateral wrist drop

Figure 2 Induration with localized erythema

A boy was born at 42 weeks' gestation following 4 days of labor. Epidural anesthesia was used. Bilateral wrist drop was noted immediately after delivery (figure 1). Induration with localized erythema was seen symmetrically on the dorsal aspect of both upper limbs (figure 2). Examination was in keeping with isolated bilateral radial nerve palsies.

An ultrasound scan of the upper arms revealed symmetric thickening of the radial nerves distal to the radial groove at the posterolateral humerus. Electrophysiology tests suggested no evidence of acute denervation. Following physiotherapy and occupational therapy, improvement in the infant's wrist position was seen within 2 weeks of birth. Postulated mechanisms for these injuries include reduced fetal activity for reasons including reduced amniotic fluid volume.^{1,2}

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