

# NEWBORN WITH CONGENITAL ISOLATED RADIAL NERVE PALSY – A CASE REPORT

Ang Xi Yuan, Lim Kuan Yan, Kavinan, Ong Lik Han  
UNIMAS, Kuching, Sarawak  
Sarawak General Hospital, Kuching, Sarawak

## INTRODUCTION:

Isolated radial nerve palsy in neonate is rare entity due to under-reporting as uniformly it has complete recovery. Theory including radial nerve compression due to isolated compression certain bony prominences intrauterine. Review literature of late only up to 56 cases reported. Despite with conservative management, it shows complete recovery.

## REPORT:

A male newborn was born at Unsure of Date for unbooked, unscreened 24 years old healthy primigravida mother via Spontaneous Vertex Delivery, cephalic presentation with birth weight of 2.42 kg, length 48cm. Intrapartum prolonged second stage for 18 hours, attributed to poor maternal effort, with no instrumental or fundal assisted delivery documented.



**Figure 1:** demonstrates a lesion over lateral aspect of distal right arm with wrist and finger drop over right upper limb

Further history, post natal, no branula insertion, blood taking/injection and no blood pressure measurement done over baby's right upper limb. IM Vitamin K and Hep B were injected over both buttock. Estimated age from external features corresponds to 40 week POG. Apgar score 8 and 9 at 1 and 5 minutes, with Apgar score not complete due to tachypnea. Baby's moro reflex was complete apart of persistent right wrist drop with lack of extension wrist and

fingers extension. Otherwise, intact right deltoid, triceps and biceps function, tricep reflex normal, moro reflex complete and palmar reflex normal bilaterally. 3x1cm irregular cutaneous lesion seen over lateral aspect of distal right arm firm in consistency, tether to skin, freely mobile. No congenital constrictive band observed.

Radiological investigations of right upper limb performed and unremarkable. Baby was subjected to conservative management, by which splint were applied. By 12 days of age noted full restoration of right wrist extension.



**Figure 2:** shows baby with full recovery, able to extend his right wrist and fingers at D12 of life

## CONCLUSION:

Congenital isolated radial nerve palsy is uncommon and should be delineate with brachial plexus injuries. Thorough physical examination is essential to establish correct diagnosis which shows complete recovery.

## REFERENCES:

1. Lightwood R. Radial nerve palsy associated with localized subcutaneous fat necrosis in newborn. Arch Dis Child 1951;26:436-7
2. Valentina Carrato et al. A newborn with a wrist drop and a skin marking. The Journal of Paediatrics, January 2020, volume 216:237