

## WRIST FRACTURE IN A NEONATE AT RISK: A CASE REPORT

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**Introduction:** Neonatal fractures have been previously known to be birth related or nursing care related. Previously reported neonatal fractures were clavicle, skull, humerus and femur. Present case report presents a distal end radius and ulna fracture of a premature baby in the period of NICU stay.

**Discussion:** A baby girl was born at 29week period of gestation with the birth weight of 590mg via emergency lower segment caesarean section due to maternal severe pre-eclampsia and oligohydramnios. It was uneventful during the process of delivery. However, she was admitted NICU for respiratory distress syndrome and prematurity with extremely low birth weight. Whilst in NICU, she was noticed having deformed right wrist at day 53 of life. She had history of intravenous cannulation done on her right hand 2 weeks ago. She was later diagnosed with rickets of prematurity(OOP) with the support of raised serum alkaline phosphatase (680 U/L), low serum phosphate (1.10mmol/L). Radiograph of right wrist showed fracture of right distal end radius and ulna with volar displacement. Full skeletal survey did not reveal any other fractures

**DISCUSSIONS:** Very low birth weight(VLBW) preterm newborn is highly associated with osteopenic bone. OOP is diagnosed based on the presence of clinical manifestation, biochemical markers (low serum phosphate level in association with elevated serum alkaline phosphatase(ALP)(commonly greater than 500U/l)), radiologic finding or bone mineral content measurement. It is well known that common practice of holding a neonate hand in hyperflexion of wrist during intravenous cannulation of hand region of a neonate. Therefore, we believe that this had led to the fragility fracture.

**Conclusion:** Neonatal fracture of distal end radius and ulna is rare. high index of awareness should be inculcated in nursing care staff. Excessive manipulation of extremities in the neonate should be avoided.