

Incidence Of Newborn Clavicle Fractures: A Review In Hospital Tengku Ampuan Rahimah (HTAR), Klang

¹Danappal S, ¹Kandiah S, ¹Arumugam S, ¹Rifa A, ¹Kassim K

¹Orthopedic, Hospital Tengku Ampuan Rahimah, Jalan Langat, 41200, Klang, Selangor

INTRODUCTION:

Clavicular fracture is the most common fracture in a newborn and is the second most common birth injury. The objective of this study is to determine the incidence of newborn clavicle fractures in HTAR Klang.

MATERIALS & METHODS:

This is a prospective study from January 2016 to December 2017. Patients who were referred to the Orthopaedic team for clavicle fracture were the inclusion criteria and data for sociodemographic, associated risk factors and the outcomes were obtained through medical record review.

RESULTS:

Twenty-five cases of clavicle fracture (0.12% of total live births, n = 21004) were identified. The incidence of male was slightly higher than female. All fractures were located at the mid shaft of the clavicle and none had brachial plexus injuries. Most infants affected were delivered through vaginal delivery. The occurrence of clavicle fracture was seen more on the left side. The average birth weight was 3310g. Almost all were term babies and maternal obesity and gestational diabetes mellitus were the other factors that increased the risk of clavicle fractures.

	n	%
Sex		
Male	13	52
Female	12	48
Mode Of Delivery		
Vaginal	17	68
Caesarean	2	8
Instrumental	6	24
Gestational Age		
Preterm	1	4
Term	24	96
Side Of Fracture		
Right	11	44
Left	14	56
Brachial Plexus Palsy	0	0
Maternal Obesity	8	32
Birth Weight		
>3500g	13	52
3000-3400g	6	24
<3000g	6	24
GDM	7	28

Figure 1: Clinical feature of clavicle fracture

DISCUSSION:

The incidence of neonatal clavicular fractures in HTAR is 1.2 per 1000 live births. Fetal birth weight and mode of delivery was reported to be an important factor.

CONCLUSION:

The delivery of newborn with a clavicular fracture appears to be a transient with no long term implication.

REFERENCES:

1. Eun Sub Ahn et al. Neonatal clavicular fracture: Recent 10 year study. Pediatric International. Official Journal of the Japan Pediatric Society. November 2014.
2. B. Kaplan et al. Fracture of the clavicle in the newborn following normal labour. International Journal of Gynaecology & Obstetric 63(1998) 15-20