

CENTER-BASED EPIDEMIOLOGIC STUDY OF CONGENITAL UPPER LIMB ANOMALIES

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INTRODUCTION:

There have been scarce data about the incidence of congenital upper limb anomalies (CULA) in Malaysia. The information gained from epidemiologic study can help in allocation of healthcare cost and human resource.

METHODS:

Epidemiologic data from medical records of patients with surgeries performed for their CULA from year 2018 to year 2020 in Hospital Kuala Lumpur was recorded and was analysed descriptively using SPSS 26.

RESULTS:

There were 84 anomalies in 65 patients. The most common anomaly was syndactyly (26.2%) and the second was preaxial polydactyly (19.0%). For syndactyly, 81.8% occurred in Malay ethnicity and 18.2% in Indian. Most incidence of syndactyly occurred in male patients (86.4%). There was more incidence of syndactyly in right hand (54.5%). The most common site of simple syndactyly was between middle finger and ring finger (38.5%). For polydactyly, Malay race had the highest number of patients which was 62.5%. There were more female patients with preaxial polydactyly (56.3%). Preaxial polydactyly occurred more common in right hand (87.5%). For thumb hypoplasia, Chinese group had the highest incidence which (57.1%). For other deformities, Malay group contributed the highest number.

Table 1: The frequency of the common CULA in our center

CULA	Frequency	%
Syndactyly	22	26.2
Preaxial polydactyly	16	19.0

Constriction band syndrome	12	14.3
Congenital trigger thumb	11	13.1
Others	23	27.4

DISCUSSIONS:

Other countries have relatively complete data on CULA (1). The incidence of CULA was not clear as there was no further elaboration of the musculoskeletal birth defect in a previous study on birth defect in Malaysia (2). CULA happens predominantly in male patients (3, 4). Our cohort reflects this fact. Syndactyly is traditionally the most common CULA (5). Recent years, polydactyly has been reported as the most common CULA (6, 7). We found that syndactyly is still the most common.

CONCLUSION:

This study has served to bring insight on the relative incidence of CULA in our center. A better organised database is needed in the future to further investigate the epidemiology of CULA nationwide.

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