

**PP 08 - Incidence trends of skeletal dysplasia in the Sri Lankan population**

Y. D. Kolambage<sup>1\*</sup>, U. A. Liyanage<sup>2</sup>, V. H. W. Dissanayake<sup>2</sup>

<sup>1</sup>Department of Anatomy, Faculty of Medicine, Sabaragamuwa University of Sri Lanka,  
Ratnapura, Sri Lanka.

<sup>2</sup>Department of Anatomy, Faculty of Medicine, University of Colombo, Sri Lanka.

**Introduction:** Skeletal dysplasia (SDs) or osteochondrodysplasias are a heterogenous group of rare disorders that manifest due to developmental defects in the chondro-osseous tissue. The worldwide prevalence at birth of SD is approximately 1:5000 -1:3000 births. The incidence of SDs in Sri Lankan population has not been quantified. The aim of this study was to examine incidence trends of SD in Sri Lankan population using data from Electronic Indoor Morbidity and Mortality Reporting (eIMMR) system, which gathers all morbidity and mortality data from the entire country.

**Methods:** Firstly, the International Classification of Diseases (ICD) codes for SDs were identified and listed. Then the complete data set for the years 2017, 2018 and 2019 were extracted from the eIMMR database and incidence by calendar year, age, gender, region and specific SD types were studied using standard descriptive statistics.

**Results:** Respective incidence rates of SDs in the years 2017, 2018 and 2019 were 5.2, 8.1 and 8.0 per million population. The majority of the reported cases were children from 1 to 12 years and a female predominance was noted in all three years. More than half of the cases were reported from Colombo (27.0%) and Kandy (26.8%) combined. Sixty percent of cases were diagnosed as osteogenesis imperfecta (OI). The incidence rates of main SD types in the year 2019 were: OI – 4.63; Osteopetrosis–0.87; Achondroplasia – 0.78 per million population. Rising trends were observed in the incidence of achondroplasia and osteopetrosis, while the incidence of OI showed a relatively stable trend.

**Conclusion:** Overall SD incidence rate showed a stable trend since 2018, yet further research is required to confirm this proposition. This study reveals a significantly high incidence of osteogenesis imperfecta and a female predominance of SD in the Sri Lankan population.

**Keywords:** Skeletal dysplasia, Osteochondrodysplasia, Trends, Incidence, Sri Lanka

\*Email: yasas@med.sab.ac.lk