

# PREVALENCE, PATTERNS AND MANAGEMENT OUTCOMES OF PEDIATRIC SURGICAL PATHOLOGIES IN THREE HOSPITALS IN LOW AND MIDDLE INCOME COUNTRY, CASE OF CAMEROON

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## INTRODUCTION

Many surgical pathologies of childhood are amendable to simple cost-effective surgical interventions. If left untreated, delay in intervention, or improperly treated will lead to severe impairments, lifelong disabilities and increase in overall pediatric mortality. In Cameroon, little is currently known for the spectrum, caseload, public health challenge, and case specific mortality of surgically managed pediatric conditions. The objective of this study was to assess the prevalence, patterns and outcomes of pediatric surgical pathologies in three hospitals in Cameroon.

## DISCUSSION

Age of patients, attending surgeon and anesthesiologist, delay of presentation of patients, complications of management are considered as factors determining outcome of management of pediatric surgical patients.

Mortality was highest for cases managed operatively (70.7%) compared to those managed conservatively (29.3%). The most common causes of post-operative death reported in this study was cardiorespiratory (31.0%) arrest and shock (51.7%).

## METHODS

A hospital based retrospective descriptive analysis of children between 0 and 18 years admitted for surgical conditions in the selected hospitals from January 2019 to December 2021. Patient's files and Theatre registers were reviewed. A data extraction form was used to collect socio-demographic and clinical data.

## CONCLUSION

Surgical pathologies constitute a significant proportion of pediatric admissions. Injuries, congenital malformations and gastrointestinal surgical pathologies are most frequently observed. Operative and neonatal surgical mortality is extremely high.

## Results

There were 1526 pediatric surgical admissions. This constituted 12.6% of all pediatric admissions. There was a male predominance of 63.5% giving a 1.7:1 M:F. Age group 6 to 12 was the most frequent. Neonates represented 7.3% of all surgical patients. Most patients 58% presented as an emergency. 23.2% were admitted as referrals, with close to 20% of referrals from secondary level hospitals. 36% of patients presented late with symptoms lasting more than 1 week to several months, with up to 14% having disease complication on admission. Pediatric injuries 39.8%, congenital malformations 25.6%, and gastrointestinal surgical pathologies 14.8%, were the most observed patterns of presentation. 4% of patients Left against medical advice mostly for financial constraints. 2% were referred for better management, there were complication of management in 6% of patients. The overall mortality rate was 4.3%. Mortality was highest in neonates, with mortality rate of 31.3%. Diagnosis with the leading mortality were; Gastrocshisis 91.7%, Head injuries 54.5%, Burns/omphalocele 36.4% and duodenal atresia 40%.

## GRAPHS

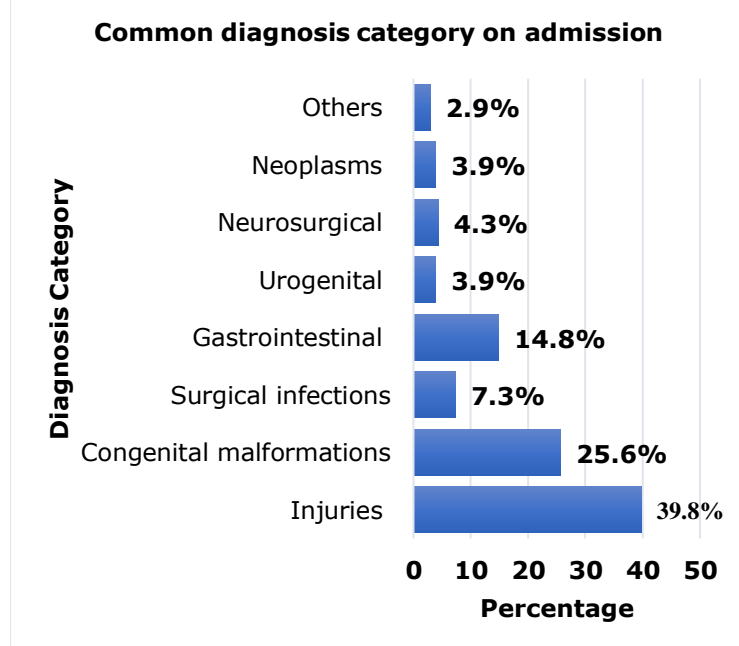


Fig 1: Most common diagnosis category on admission

## REFERENCE

Okoye MT, Ameh EA, Kushner AL, Nwomeh BC. A Pilot Survey of Pediatric Surgical Capacity in West Africa. World J Surg. 2015; 39 (3):669-76