

Stroke in Iraqi children: Experience of Children Welfare Teaching Hospital

Nebal W Saadi¹ *FICMS, FACMS*, Batool A Gh Yassin² *MBChB FICMS*

¹Dept. of Pediatrics, ²Dept. of Community Medicine, College of Medicine, Baghdad University

Abstract

Background Stroke in childhood is serious disorder about which little is published.
Objective To determine demographic and presenting features of children with stroke.
Methods A cross sectional study was conducted on cases of pediatric stroke admitted to Children Welfare Teaching Hospital during May 2008-August 2011. Cases classified radiologically into ischemic and hemorrhagic types. Basic data and clinical presentation were gathered.
Results Sixty nine children (49 boys, 20 girls), aged 1 month-14 years were enrolled. Annual hospital admission rate was 54.2 /100000; boys:girls ratio was 2.5:1, girls were younger than boys. Ischemic stroke was found in 58% of cases. Patients with hemorrhagic stroke were younger than those with ischemic type. Those aged <1year account for 55.1% (82.8% of patients with hemorrhagic stroke) while half of those with ischemic type aged 1-5 years. The commonest presentation in both types was seizure, mostly among infants. About 2/3 of patients were from Baghdad.
Conclusion Stroke in children is more common among boys. Ischemic type is commoner than hemorrhagic. Those with hemorrhagic stroke tend to be younger than ischemic. The majority of children with hemorrhagic type present at age younger than one year. Seizure was the most common presentation in both types.
Key words Stroke; Iraqi children; Ischemic; Hemorrhagic

Introduction

Stroke is increasingly recognized as a cause of childhood disability and lifelong morbidity: population-based estimates of the annual incidence of childhood stroke (ischemic and haemorrhagic) range from 2.3 to 13.0 per 100,000 children and incidence rates in neonates are closer to 1 per 5000 live births ⁽¹⁾. Stroke is among the top ten causes of death in children in United States ⁽²⁾. Although considered rare by adult standards, stroke is more common in children than brain tumours. Subtypes include ⁽³⁾:

- Arterial ischemic stroke (AIS)
- Cerebral sinovenous thrombosis (SVT).
- Haemorrhagic stroke (HS).

Childhood ischemic stroke can include both arterial ischemic stroke (AIS) and sinovenous thrombosis (SVT) ⁽⁴⁾.

Stroke in childhood can have many causes. Diagnosis is often delayed owing to low clinical suspicion and the need to exclude the frequent mimics of stroke in childhood ⁽¹⁾. Stroke in childhood has long been thought of as a rare and benign occurrence. However, advances in non-invasive neuroimaging have led to increased recognition of this disorder in children who might otherwise have received a diagnosis of hemiplegic cerebral palsy. Furthermore, the idea that children recover well from stroke has been contradicted by the results of outcome studies that show a high rate of lifelong morbidity: 10% of children who