have a stroke die; 20% have further stroke; and 70% have seizures or other neurological deficits. About a half of incident childhood strokes are ischemic, and the incidence is higher in boys than it is in girls [1].

The clinical presentation of stroke in children varies according to age, underlying cause, and stroke location. The most common presentations include hemiplegia and seizure in ischemic stroke, headache and vomiting in hemorrhagic stroke, and headache and decreased level of consciousness in children with cerebral venous thrombosis [5].

The current study aimed to calculate the prevalence of stroke among patients admitted to Children Welfare Teaching Hospital / Baghdad-Iraq, to study some demographic characteristics of patients with stroke and to throw light on the most common presenting symptoms of patients with stroke.

Methods

Study Design

A cross sectional study was carried out to review all cases with stroke admitted to Children Welfare Teaching Hospital (CWTH)/4th ward during the period from May, 2008 to August, 2011. Ethical approval was obtained from the Research Ethical Committee - Human Resources Development and Training Center - Ministry of Health, Iraq.

Setting

Children Welfare Teaching Hospital is the tertiary pediatric referral center for Baghdad City. Annual admission is about 12,000 child/year. Revision of the ward registry and medical records was performed during the period from 1st of May to 1st of October, 2011.

Sampling Technique

Selection of Participants; Case identification for ischemic and hemorrhagic stroke was based on the 4th ward (neurology department) registry which commenced by seniors responsible for patients' diagnoses and management. All cases of stroke aged from 1 month to younger than 14 years who were admitted to the 4th ward [neurology department] during the study period were recorded in that registry.

Cases were classified into ischemic and hemorrhagic stroke as follow [6]:

1. Ischemic stroke; Acute ischemic stroke was defined as acute neurologic deficits lasting more than 24 hours and caused by cerebral ischemia, with neuroimaging showing parenchymal infarction.
2. Hemorrhagic stroke; Hemorrhagic stroke was defined as an acute neurologic deficit lasting more than 24 hours, with neuroimaging showing intracranial hemorrhage.

The initial and most available neuroimaging used to confirm the diagnosis of both types was Computerized Tomography Scan (CT-brain, to be followed (if available) by Magnetic Resonance Imaging (MRI) sequences, and according to availability, Magnetic Resonance Angiography (MRA) was used in cases of arterial ischemic stroke or hemorraghic type while Magnetic Resonance Venography (MRV) was used in cases of cerebral venous thrombosis. Patients included were those registered as to have stroke, ischemic stroke, hemorrhagic stroke, intracranial hemorrhage, intracerebral hemorrhage and those diagnosed with cerebral venous thrombosis. Ninety cases were found in the ward registry; only 69 were included, of which the medical records of only 25 cases were accessible at the time of the study because the hospital was under refurbishment, Twenty one cases were excluded according to the following criteria:

1. Patients with suspected (no definite) diagnosis of stroke.
2. Patients diagnosed later to have ADEM (Acute Disseminated Encephalomyelitis) or other stroke mimics.
3. Cases with traumatic intracranial hemorrhage.
4. Cases with hemiplagia but normal neuroimaging [as the patients' eligibility required a radiological diagnosis of ischemic stroke or lesion consistent with it].