Abstract

Background: Cerebrovascular accident (CVA) is one of the leading causes of morbidity and mortality worldwide, with the majority being of an ischaemic nature and the minority are haemorrhagic. Increased age, metabolic and lifestyle diseases are the leading risk factors for this condition.

Objective: To describe the profile of patients admitted with stroke to Klerksdorp-Tshepong (KT) hospital complex, in the Northwest province of South Africa, and their management outcomes for the time period 01st January 2018 to 31st December 2018.

Methods: A retrospective analysis of the health records of patients admitted with CVA for the time period 01st January 2018 to 31st December 2018 in the KT hospital complex, Northwest Province. The following information was collected: demographics, co-morbidities, time of symptom occurrence and presentation to hospital, time to imaging, management, complications, and length of stay (LOS).

Results: The analysis included 121 patients of which 52.9% (n=64/121) were female, 55.4% (n=67/121) were over 60 years of age and 92.2% (n=106/115) were unemployed, half of the patients were referred from home (51.7%, n=60/116) and 63.0% (n=75/119) travelled an estimated distance of more than 10 km. Clinical manifestation noted were as follows: 83.5% (n=101/121) limb weakness, 36.4% (n=44/121) speech difficulty and 9.1% (n=11/121) facial weakness. Most patients utilised ambulance for transportation to hospital (59.5%, n=72/121). Many patients had an ischaemic stroke (89.5%, n=85/95), whereas 10.5% (n=10/95) had a haemorrhagic stroke. More than 90% of patients had co-morbidities (95.8%, n=115/120) which included: hypertension (74.8%, n=86/115), dyslipidaemia (30.4%, n=35/115), HIV (23.5%, n=27/115), diabetes (20.0%, n=23/115) and other (30.4%, n=35/115). The median time of onset of symptoms to CT scan was higher in patients with persistent disability than those who achieved neurological recovery (median time in hours [IQR]: 8.50 [5.0-12.0] vs. 6.0 [4.0-11.0]). Thrombolysis was received by only 1.7% (n=2/121). Overall in hospital complications were noted to be 10.1% (n=12/119). The discharge outcomes noted were as follows: persistent disability 67.8% (n=82/121), complete neurological recovery 22.3% (n=27/121) and death 9.1% (n=11/121).

Conclusion: Ischaemic stroke (IS) is the most common type of stroke seen in the study population, with a high number suffering persistent neurological impairment

associated with late presentation to the hospital. Only a minority access thrombolytic therapy. Health education on stroke is of paramount importance at community level (families, media, organisations, primary health care, emergency medical services etc.) regarding symptom recognition, early presentation to hospital as well as current management guidelines.

Key words: *Ischaemic stroke, stroke, cardiovascular disease, thrombolysis, Neurological impairment.*