Computed tomography stroke findings and population demographics at Pelonomi Hospital, Bloemfontein

Background: Stroke remains the highest cause of death in patients more than 50 years old in South Africa and the fourth highest cause of death overall. There is a paucity of information regarding this disease in Free State province.

Objectives: To assess the stroke profile of patients referred for computed tomography (CT) imaging to our institution along with evaluating factors that could improve stroke management.

Method: The demographic information, stroke risk factors, stroke types and time to imaging were evaluated for all patients who presented for CT stroke imaging from July 2014 until July 2015. Information was gathered prospectively from the hospital and radiology information systems.

Results: The study included 174 patients (53.5% women, 46.5% men). Their mean age was 59 years (SD 14.6). The most prevalent risk factors were hypertension (83.7%), smoking (20.5%) and diabetes (15.0%). The population group consisted of 67.8% ischaemic (n = 118) and 32.2% (n = 56) haemorrhagic strokes. The majority of patients with a known time of symptom onset (n = 102) presented after 8 h (82.4%). The median order to report time (ORT) was 61 min (range 18–1361 min). The median arrival to report time (ART) was 32 min (range 4–893 min).

Conclusion: Our stroke population did not differ significantly from others in South Africa and Africa overall. Pre- and in-hospital delays significantly influenced patient numbers qualifying for thrombolysis.