

Main brain pathologies diagnosed on CT scan in central Africa

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Summary

Context and objective: Cerebral pathology and neurological disorders represent a significant cause of morbidity and mortality worldwide. The objective of this study was to characterize the main CT cranioencephalic pathologies in a Third World area.

Methods: A retrospective study of data from medical records of patients who underwent a brain CT scan was conducted for 24 months in two big hospitals of Kinshasa in central Africa. The major indications of the explorations, the main pathologies found and the demographic criteria have been statistically analyzed.

Results: The clinical suspicion of stroke, the cranioencephalic trauma and the headaches dominated the indications. Of the 3179 CT scans re-evaluated, 39.8% (n = 1263) showed no remarkable

changes, while 60.2% (n = 1916) had a cranioencephalic abnormality. Vascular pathologies (mainly strokes), traumatic lesions, cerebral atrophies and sinusitis were the main diagnoses with cerebral CT. The male sex and age ≥ 60 years were the most significant predictors of the incidence of stroke. The male sex, young age, traffic accidents and violence were characteristic of traumatic pathologies.

Conclusion: The present study has demonstrated many CT explorations were unnecessary, and in this tropical area, CT abnormalities showed a pattern of vascular cerebral pathologies before epidemiological and demographic transitions by the emergence of traumatic lesions and the tendency to decline of endemic infectious pathologies.

Key words: Brain pathology; CT; central Africa