## Spontaneous Intracerebral Hemorrhage: Patient's activity before the onset of stroke, localization and volume of intracerebral hemorrhage in Black Africans

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## Summary

Context and objective: Stroke is the major cause of morbidity, disability, and mortality in both developed and developing countries. And some published studies on the patient's activity before the stroke occurrence indicate that there is an increased risk of the onset of acute stroke during these activities. In our community, these data are not yet assessed. A better understanding of the underlying pathophysiologic mechanisms of stroke could provide more effective insights for both preventive strategies and optimization of therapeutic approach. The purpose of this pilot study was to examine whether intracerebral hemorrhage may be linked to patient's physical activity before the onset and to carry out any relationship with location of the hemorrhage.

*Methods*: The patient's physical activity before the onset of stroke, localization and volume of hemorrhage of 58 patients (40 men and 18 women, aged 39 to 81 years) admitted with spontaneous intracerebral hemorrhage seen by CT (fig.1) in Kinshasa, Democratic Republic of the Congo, from 2012 to 2015, were recorded and analyzed using logistic regression model to access patient's activities and location of intracerebral hemorrhage.



**Figure 1.** CT image of hyperdense lesion of IntraCerebral Hemorrhage in left thalamus with intraventricular rupture during sexual activity

*Results*: In 31% of the case, the onset develops after emotional factors, in 24% in the lavatory, in 15% during housework and in 12% during sexual

activity (p>0.05). There is no significant difference between those activities with location of intracerebral hemorrhage (p>0.05).

*Conclusion*: Most patients in this study seem to be stricken by the hemorrhagic stroke during some physical activity. It is less certain that location of ICH is linked with these activities.

**Keywords**: Intracerebral hemorrhage - Activity-Ictus onset- Black Africans