## **Letter to the Editor**

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## Dear Editors,

We are impressed with the article [1] on brain aneurysms in Rwanda. It is important to know that even in our resource poor country, we have the capability of treating one of the most demanding neurologic disorders. In Rwanda, and other resource poor countries, it is difficult to diagnose intracerebral aneurysms given the limited resources and training of the majority of the physicians. We currently have seven CT scanners, and two MRI scanners, but don't have Intra-arterial digital subtraction angiography, which is the standard diagnostic tool in cases such as this. Diagnoses depends on computed tomographic arteriography (CTA) and magnetic resonance angiography (MRA), both of which take place in only one hospital, which is a private hospital. In addition, these tests are limited to larger aneurysyms, greater than 3-5mm. Out of the seven CT scanners five are public. The two MRI scanners are all found in private hospitals. This means that few patients, given the Rwandan economy, can access the facility.

In Rwanda, we have only four intensive care units (ICU) for all patients, whether surgical or otherwise, and these patients require ICU care before and after surgery, so even if we improve the referral system and lower the cost, limited ICU space adds to the constraints.

We have two neurosurgeons and two neurologists and all of them work in tertiary hospitals, meaning that a patient first has to be seen by 2 to 3 doctors prior to seeing the clinician with the required experience and expertise. Patients first go to Health centers, then to District hospitals then to those hospitals. This makes it complicated and excludes those who need the most urgent care.

The signs and symptoms of intracerebral aneurysm rupture are classic, with the sudden onset of "the worst headache of my life". Some patients also have focal signs from blood dissecting into the brain. Most of these develop hypertension and are then managed as hypertensive hemorrhagic patients and this may worsen their outcomes before consulting a neurosurgeon.

Brain aneurysms are rare but life threatening and life altering for those who survive. Only a minority may return to work. For those who survive the rupture, surgery to repair the aneurysm alters their life expectancy and quality of life significantly.

We congratulate the neurosurgical team that, despite the current constraints, is so dedicated and so successful. We hope for greater success as Rwanda climbs the economic ladder of success.

Thank you,

## REFERENCES

[1] Nkusi AE, Muneza S, Hakizimana D, Nshuti S, Munyemana P. Original Article INTRACRANIAL ANEURYSMS CLIPPING IN RWANDA , CAN IT BE DONE ? WHAT ARE THE CHALLENGES ? 2017;74(March):7–10

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