Confronting the Prevalence of Limb Amputation from Peripheral Artery Disease in Nigeria

Sir,

This letter aims at highlighting our local challenges in reducing the high prevalence of limb amputation due to peripheral artery disease (PAD) in Nigeria.

Recent data from peripheral vascular ultrasound registry at our institution revealed that up to 29.5% of patients have evidence of significant luminal stenosis.^[1] In Southern Nigeria, the amputation rate in PAD is as high as 72.2%;^[2] at the same time, amputation rates in the United States recorded a decrease from 7.26% to 5.79%.^[3]

Despite the high burden of PAD and limb amputations, there are limited facilities and expertise for percutaneous transluminal angioplasty (PTA) in Nigeria. Even where the services are available, there is lack of awareness, high cost, and limited supply of devices and consumables, limiting the positive impact of these services to the community.

Our preliminary experience of 25 cases of PAD who were treated with PTA at our institution from Northwestern Nigeria revealed that six of them had either type C or type D aorto-iliac disease in addition to distal lesions. At 6-month follow-up, nine of them had limb amputation, while one patient died a day after the procedure. Out of those who had amputation, six were diabetic. Figures 1-3 represent an example of a patient who had complete resolution of symptoms and blood flow restoration after balloon angioplasty.

Amputation rate is high in our community due to numerous limitations such as late presentation,

limited diagnostic facilities (largely relied on Doppler ultrasound), and few functional facilities for endovascular therapy. Currently, there are only four centers serving more than 180 million Nigerians. Even in these few centers, there is serious limitation of ideal devices in addition to the lack of bail-out facilities (stenting, drug-eluting balloons, bypass surgeries, etc.). Furthermore, there are even fewer experts dedicated to the surgical management of peripheral vascular disease.^[4] As a result, majority of patients with PAD end up with amputation in Nigeria. We feel that improving the availability of angiographic facilities, trained workforce, and appropriate tools/consumables will significantly improve the outcomes of endovascular care of PAD in Nigeria.

Therefore, here, we voice out these challenges so that policymakers, clinical societies, organizations, researchers, and industry may develop interest in supporting our humble efforts in improving the quality of care to patients with PAD in Nigeria.

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Conflicts of interest

There are no conflicts of interest.

Figure 1: Digital subtraction angiogram of the superficial femoral artery showing severe occlusive disease at its origin. There are numerous collaterals opacifying the distal stump of the superficial femoral artery

Figure 2: Unsubtracted angiogram of the superficial femoral artery showing serial balloon dilatation of the superficial femoral artery

Figure 3: Digital subtraction postangioplasty angiogram showing restoration of blood flow through the superficial femoral artery

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