South Africa

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What is the prevalence of endovascular SFA therapy as compared to surgical?

The prevalence of endovascular management in SFA disease is high and fairly stable. SFA occlusive disease is managed predominantly with angioplasty and stenting (Figure 1). Currently, open surgery accounts for < 10% of cases. Primary stenting has been used more commonly than angioplasty in recent years, but over the last year, the trend appears to be reversing with the availability of DCB angioplasty.

How would you describe device availability in your country, both in types of devices and different vendors within each class?

POBA, bare-metal nitinol stents, and the woven Supera stent (Abbott Vascular) are readily available in South Africa. Drug-coated balloons (In.Pact Admiral, Medtronic; Lutonix, Bard Peripheral Vascular, Inc.) have only recently become available and are still in the process of being registered with the Medicines Control Council. As a result, each patient treated with this technology needs individual motivation and registration with the council. Drug-eluting stents for the peripheral arteries are not available. The SilverHawk and TurboHawk plaque excision systems (Medtronic) are also readily available, but utilization is limited because of the associated high cost, especially if a distal protection device is required. The AngioJet thrombectomy system (Boston Scientific Corporation) and Rotarex thrombectomy device (Straub Medical AG) are available.

In what ways does reimbursement (both government and private if applicable) affect device use? Which device classes are most affected?

Approximately 12% to 15% of the population have medical insurance. The rest of the population utilize the government facilities or pay privately for medical care. Preauthorization needs to be obtained before procedures are performed, or they are not reimbursed.

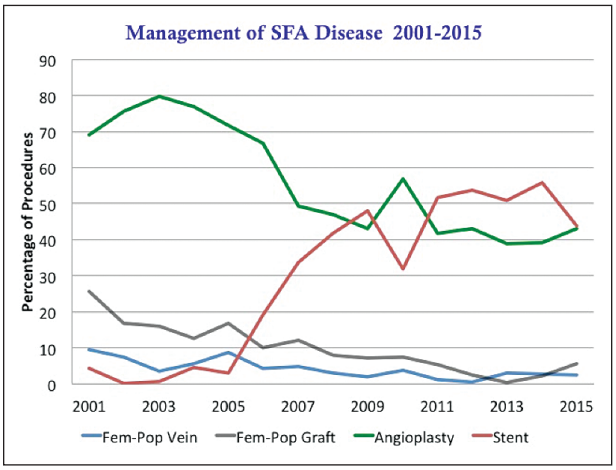

Figure 1. Trends in the management of SFA disease in a group practice in Cape Town 2001–2015 (n = 2,672 patients).

Angioplasty balloons, stents, and other devices are billed individually rather than as part of a global fee. Patients with medical insurance are subject to a prosthesis limit that applies to any device that remains in the body and includes stents. In the government sector, the availability and reimbursement of devices varies between provinces and even among hospitals within a province. The supply chain is based on a tender system, and devices are usually provided to the state at a significant discount compared to the private sector. Clinicians are limited by the devices available on the shelf.

Are there any historic or cultural forces unique to your country that have affected the penetration of endovascular options?

There are approximately 50 registered vascular surgeons in South Africa serving a population of 53 million people. Most vascular surgeons are located in the large cities. Endovascular surgery is predominantly performed in the academic centers and in the large private hospitals. General surgeons perform vascular surgery in rural and smaller towns, and this would be exclusively open surgery.

Map of South Africa - Single Color by FreeVectorMaps.com

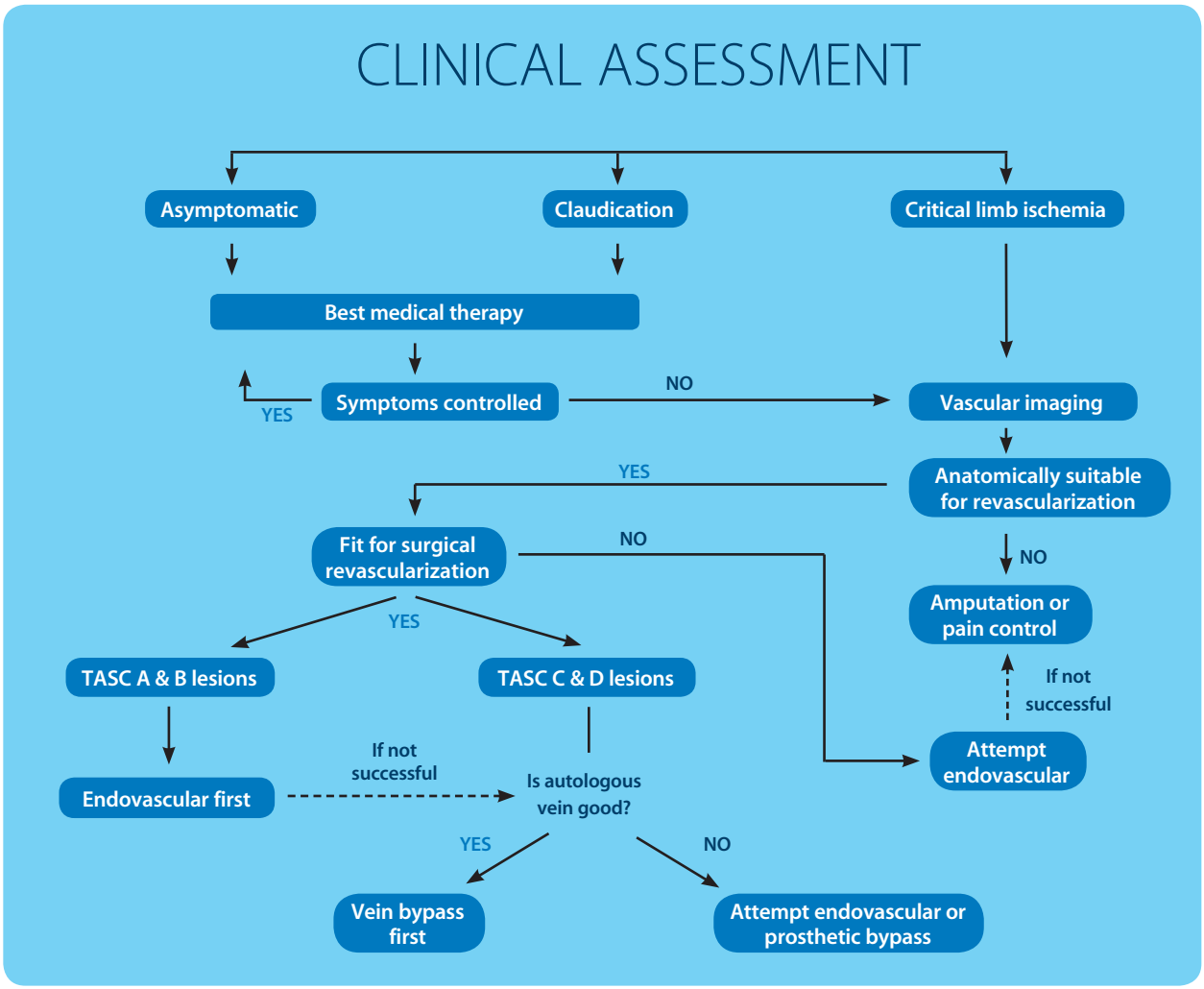

Figure 2. Vascular Society of South Africa (VASSA) guidelines: management of the SFA.

How do most physicians receive training in endovascular therapies in your country?

Vascular surgery is a subspecialty of general surgery. Trainees complete the general surgery fellowship (over 5–6 years). This includes at least 6 months on a vascular surgery rotation. Registration as a vascular surgeon requires another 2 years as a vascular fellow in an accredited vascular unit in one of the academic centers, as well as the successful completion of an exit exam. Training includes open and endovascular surgery. In South Africa, interventional vascular procedures are performed predominantly by vascular surgeons rather than interventional radiologists.

What is your personal strategy or algorithm for treating:

- **Short, focal lesions:** POBA with bailout stenting with a bare-metal nitinol stent.
- **Long lesions:** DCB angioplasty with bailout stenting with a bare-metal nitinol stent.
- **Calcified lesions:** Primary stenting with a woven nitinol or bare-metal stent.
- **CTOs:** Primary stenting.
- **In-stent restenosis:** DCB angioplasty or restenting with bare-metal nitinol stent.
- **Claudicants:** Best medical therapy. In patients with incapacitating symptoms despite best medical therapy, treatment depends on the patient. Patients who are good candidates for surgery and have an adequate vein would be considered for a bypass procedure. The modality of endovascular intervention depends on the extent of disease. Management is largely based on the algorithm shown in Figure 2. ■