Spain

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

SFA therapy is lead by vascular surgeons in Spain. In my country, vascular surgery has in fact, been a double specialization since 1978 (ie, angiology and vascular surgery). That means that vascular patients are managed by vascular surgeons in terms of prevention, medical, and interventional treatment.

Nowadays, an endovascular-first attempt is the most common approach for SFA lesions in Spain. More than 70% of SFA revascularizations, when they are indicated, are performed by endovascular means. Only CTOs longer than 20 cm, with heavy calcification, or that have failed previous endovascular revascularizations are preferentially treated with bypass techniques. Several factors justify this approach, including the fact that vascular surgeons learned about endovascular techniques during the last 10 years, new devices are fully available in our hospitals, and endovascular techniques are usually faster and associated with shorter hospital stays. And, if the endovascular treatment fails, the same team can address the complication and its solution.

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

All CE Mark–approved devices are commercially available in Spain. Most of the devices (catheters, balloons, stents, endografts, etc) are provided by direct representatives of the larger manufacturers, and we also have a very professional network of distributors for smaller manufacturers.

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

The Spanish National Health System does not have a reimbursement system, as it is funded by the national tax system. Spain is administratively divided into 17 autonomous communities. All of these communities have their own budget for health purposes and activities, and a portion of these budgets is dedicated for hospital practices. Some hospitals belong to the National Health System, and others are semiprivate institutions linked by a specific contract with the National Health System. Each hospital has its own budget, some of which is dedicated to medical devices. By law, all public purchases that exceed more than €18,000 per year should be managed by a public tender. That is the case with vascular devices for sure. Each hospital or each department has its own budget and tender. When the budget is exceeded, then we have a problem. There are some optional solutions: stop the activity, create another tender, or create economic deficit. This point makes the difference between good and bad managers.

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

There are two major limitations: the physician's decision and capabilities and the financial issues. The first is related to evidence and training. The second is clearly related to the general economic situation, budget management, and commercial prices.

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

Twenty years ago, three different scenarios summarized the endovascular field in Spain. First, a minority of vascular surgeons declared themselves to be "non-endovascular believers." They lost time and tried to recover it when they became converts. The second scenario was related to vascular surgeons who created turf battles with interventional radiologists and started their endovascular experience alone, with a considerable collection of iatrogenic injuries in their learning curve. The third scenario was smoother and smarter, in my opinion. Vascular surgeons and interventional

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radiologists merged together for a team-based philosophy, offering the best care to vascular patients from both specializations.

Now, endovascular techniques are mostly led and actively performed by vascular surgeons, with or without interventional radiology cooperation. Interventional cardiology actually plays a very small role in the endovascular field in Spain. Young vascular surgeons are now trained in vascular surgery departments.

What is your personal strategy or algorithm for treating:

- **Short, focal lesions:** Generally speaking, we treat short and focal lesions with balloon angioplasty and DCBs. We apply self-expanding bare stents only in cases of huge dissections or significant recoiling, always after a long inflation time with a balloon.
- **Long lesions:** Same as the short lesions: balloon angioplasty followed by a DCB with the same philosophy for stent application.
- **Calcified lesions:** Ballooning, usually accompanied by self-expanding stents with high radial strength.
- **CTOs:** Subintimal angioplasty is our preferred approach, sometimes with self-expanding stents if proximal or distal edges are reducing flow. Occasionally, it is necessary to use reentry devices.
- **In-stent restenosis:** We start with a balloon, followed by a DCB. If balloon angioplasty is not enough, we may use atherectomy devices or covered self-expanding stents.
- **Claudicants:** Interventional treatment is only offered for severe claudication that represents a clear limitation for regular activities. Mild or moderate claudication is mainly treated by a medical approach. From the anatomical point of view, intervention is indicated only for iliac or SFA lesions. Never attempt any lesion below the knee. ■