Secondary Prevention in Vascular Amputees: a Missed Opportunity

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Background

Peripheral vascular disease (PVD) is responsible for 66% of lower limb amputations.

PVD is associated with cardiovascular and cerebrovascular disease, for which secondary prevention is well established, and GPs are now rewarded for in their new contract.

We felt that few of our vascular amputees were receiving recommended statins and antiplatelet agents, and examined our records to clarify this.

Method / Design

A retrospective review of referral documentation to a tertiary referral prosthetic clinic for amputees with PVD was conducted.

Prescribing practice between 1999 and April 2004 was examined.

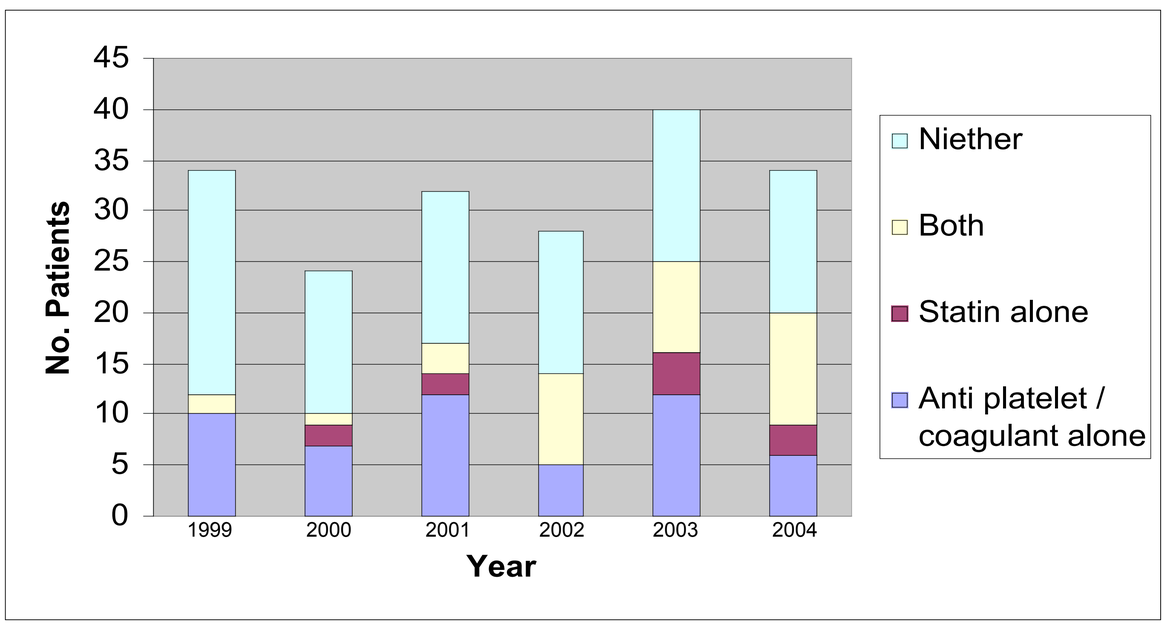
Documentation for patients referred from April 2004 – April 2005 was examined in more detail, and results for diabetics and non diabetics were compared.

Results

The proportion of these patients receiving neither group of drugs fell from 61 % to 42% from 1999-2004 (table 1).

The proportion taking both increased in 2002 from about 8% and has remained fairly stable since then, about 30% (figure 1).The proportion of diabetics receiving secondary prevention is lower than non diabetics, 29% vs. 48% (table 2).

Figure 1 – The numbers of dysvascular amputees on secondary prevention, at the time of referral, with records available locally.



….”the General Medical Services contract cannot continue to ignore a substantial subgroup of patients with atherothrombotic disease”….

Belch J, Stansby G. Peripheral Artery Disease, Still on the periphery *BMJ* 2006;322:1213

Table 1
Dysvascular amputees 1998-2004 receiving medication for secondary prevention.

	Neither	Anti coag	Statin	Both	Total
to 1999	22 (61%)	10 (29%)	0	2 (6%)	34
2000	14 (61%)	7 (30%)	2 (9%)	1 (4%)	24
2001	15 (47%)	12 (38%)	2 (6%)	3 (9%)	32
2002	14 (50%)	5 (18%)	0	9 (32%)	28
2003	15 (38%)	12 (30%)	4 (19%)	9 (23%)	40
2004	14 (41%)	6 (18%)	3 (9%)	11 (32%)	34

….”cardiovascular diseases are the most common causes of morbidity and mortality in individuals with peripheral vascular disease (PVD)”….

Roth EJ, Park KL, Sullivan WJ. Cardiovascular disease in patients with dysvascular amputation. Arch Phys Med Rehabil 1998; 79(2):205-215

Table 2:
Dysvascular amputees referred in April 2004 - April 2005 receiving medication for secondary prevention

	Anticoag only	Statin only	Both	Neither	Total
Diabetic	16 (25%)	8 (12%)	19 (29%)	22 (34%)	65
Not Diabetic	8 (18%)	3 (7%)	21 (48%)	12 (27%)	44
All Patients	25 (24%)	8 (8%)	42 (39%)	33 (32%)	109

Discussion

Given that dysvascular limb amputees represent the severe end of the PVD spectrum, it is a concern that only a small proportion of these patients are receiving optimal medical management. The difficulty in the early identification and treatment of this group of patients may have arisen because there are no dedicated groups of physicians or patient groups who are involved with the medical management of PVD.

Amputee groups tend to concentrate on improving provision of prosthetic services, but not treatment of underlying vascular disease. Primary care physicians may see this as being outside their remit, as they are not always involved in the diagnosis and treatment of the condition while vascular surgeons may be focussed more on the active physical management of the presenting problem. There is no mention of secondary prevention in the BSRM guidelines for amputee rehabilitation. It may be appropriate that local guidelines be drawn up to determine where the responsibility for the medical management of these patients lies.

….“improvement of the medical management of patients with and at risk of developing severe limb ischaemia would seem to be an urgent priority in primary and secondary care”….

Adam DJ, Beard JD, Cleveland T, Bell J, Bradbury AW, Forbes JF et al. Bypass versus angioplasty in severe ischaemia of the leg (BASIL): multicentre, randomised controlled trial. *Lancet* 2005; 366(9501):1925-1934.

Conclusion

The secondary prevention of arteriosclerosis is important in patients with PVD. For patients with severe disease (as evidenced by amputation) this is important in preserving the remaining limb and preventing cardiovascular disease and stroke. At the present time, the medical management of some of these patients is suboptimal and this is, perhaps, something that we as rehabilitation physicians should seek to address

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