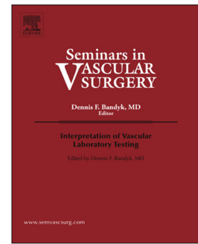
Available online at www.sciencedirect.com
ScienceDirect
www.elsevier.com/locate/semvascsurg



Smoking cessation strategies in vascular surgery

Emily L. Spangler[a], and *Philip P. Goodney*[a,b,*]

[a]*Section of Vascular Surgery, Dartmouth-Hitchcock Medical Center, 1 Medical Center Drive, Lebanon, NH 03766*
[b]*Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, NH*

ARTICLE INFO

ABSTRACT

Tobacco abuse is a highly prevalent modifiable risk factor in vascular surgery patient populations. Despite the known benefits of smoking cessation, quitting smoking is difficult for most patients. Physician advice to stop smoking can help, though more intensive or multifactorial interventions have greater impact. Smoking cessation initiatives based in vascular clinics are feasible, although currently there is significant variation in physician delivery of smoking cessation interventions. Vascular surgeons are optimally poised to be able to capitalize on the "teachable moment" of the vascular procedure to encourage smoking cessation. Concise and effective smoking cessation strategies include standardized physician "very brief advice" (a standardized advice delivery developed and validated by the National Health Service), referral to telephone counseling, and prescription of pharmacotherapy, all of which are best utilized together. This review will discuss different smoking cessation strategies, as well as their inclusion in multicenter trials designed to study delivery of smoking cessation interventions in vascular surgery patients.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

Tobacco abuse is the single most important modifiable risk factor in patients with vascular disease. Tobacco abuse affects a substantial portion of our patients; >30% of all patients with peripheral vascular disease are current smokers [1–3]. On average, smoking increases the incidence of peripheral arterial disease more than threefold among elderly Americans in a dose-dependent fashion by pack-year history [4].

Quitting smoking has been shown to have dramatic benefits in nearly every single outcome important in cardiovascular disease, including overall mortality [5,6]. For example, quitting smoking was associated with a relative risk of death of 0.64 (95% confidence interval, 0.58−0.71) in those who quit smoking compared with those who continued smokers [6]. Smoking cessation also has a powerful effect on improving surgical complications, with a number needed to treat as low as 5 [7]. Smoking cessation has been associated with decreased wound-related complications, cardiovascular complications, and secondary surgeries [8].

Despite its clear benefits, the fact remains that quitting smoking is difficult for most patients. When asked, many patients report that they wish to quit or would take advantage of free self-help programs. Nevertheless, only 4% to 7% will pursue or request action-oriented materials on their own [9]. Therefore, most conclude that physician advice to quit tobacco is important and can provide an incremental increase in smoking cessation [10].

2. Physician roles in smoking cessation

Physician advice to quit and assistance in the smoking cessation effort maintains an important role in quitting

* *Corresponding author*:
E-mail address: Philip.P.Goodney@hitchcock.org (P.P. Goodney).

http://dx.doi.org/10.1053/j.semvascsurg.2015.10.001
0895-7967/$ - see front matter © 2015 Elsevier Inc. All rights reserved.

smoking [10,11]. The US Department of Health and Human Services has set a challenging goal of increasing outpatient visits at which current users receive tobacco cessation counseling or medications from 22% to 65% by 2017 [12].

For patients who smoke, attention from a physician matters. Within New England vascular surgery practices, smoking cessation rates for those patients offered pharmacotherapy or referral to a specialist were significantly better than those sent back to their primary care physician for smoking cessation treatment (48% v 33%; $P < .004$) [1].

Similarly, in a randomized controlled trial of smoking cessation in peripheral arterial disease patients, patients quit rates were 21% with intensive smoking cessation interventions compared with only 7% in those receiving minimal interventions [13]. For this study, intensive smoking cessation interventions included both physician advice to quit and smoking cessation counseling provided by a study counselor, which included motivational interviewing, cognitive-behavioral counseling to develop a quit plan, and information about pharmacologic adjuncts, with a total of 6 or more in-person or telephone counseling sessions during a 5-month period [13]. Minimal intervention consisted of verbal advice to quit smoking from their vascular provider and provision of a list of smoking cessation programs [13].

This study's results suggest smoking cessation initiatives in a vascular clinic can be effective, but require additional adjuncts beyond clinician advice alone. Despite the impressive results achieved, one of the barriers to physicians incorporating smoking cessation in their practice is time [14], and the time and resources required for the intensive intervention may be prohibitive for a vascular surgeon to implement outside of the context of a trial.

Review of smoking cessation rates within the Vascular Study Group of New England by Hoel et al demonstrated variation in smoking rates across centers from 28% to 62% among those patients receiving procedures [1]. Significant variation in performance was found, even after adjusting for patient-level factors associated with smoking cessation. This indicates that an important opportunity exists to improve the delivery of critical smoking cessation efforts by vascular surgeons.

3. An attempt to leverage the "teachable moment" by vascular surgeons

Many have described physician-based interventions, such as those described by the Hennrikus group and others as the "teachable moment" [13,15]. This physician–patient interaction leverages the impact physicians can offer toward improving success rates at smoking cessation by building on the most opportune moments in a patient's health events.

Vascular surgery is often considered to be one of these teachable moments. And, toward this end, a Society for Vascular Surgery multicenter clinical trial entitled VAPOR (Vascular Physician Offer and Report Trial) has begun pilot testing of a standardized method for vascular surgeons to deliver smoking cessation information. The "Offer and Report" protocol provides (1) "very brief advice," (2) referral to telephone-based smoking cessation counseling, and (3) provision of nicotine replacement therapy (NRT) (Fig. 1). The "Offer and Report" protocol was developed and implemented previously in pediatric clinics and nonsurgical adult populations [16], and was more recently implemented in January 2014 within the Vascular Study Group of New England as a quality-improvement initiative.

These three elements (ie, physician advice, telephone-based smoking cessation counseling, and NRT) have each been demonstrated to be effective in assisting smoking cessation, with elements reducing the occurrence of overall postoperative complications in surgical patients significantly (pooled risk ratio = 0.56; $P < .001$), with even more substantial reductions in wound-related complications [17], as well as higher survival rates in patients who achieve smoking cessation [18–20]. These findings regarding the role of smoking cessation assistance in patients with vascular disease, combined with the vascular procedure itself as a teachable moment, present us with a truly unique opportunity to have a significant impact on smoking and smoking-related complications.

The presence of a teachable moment, such as the surgery itself, has been associated with higher quit rates [11], not only in vascular procedures, but in general surgery and orthopedic surgeries as well [7,21,22]. Similarly, more invasive vascular procedures tended to have higher smoking cessation rates, ranging from 50% with open abdominal aortic aneurysm repair, but only 27% with carotid stenting [1]. Combining this

VAPOR:
The Offer and Report Protocol

Step 1: Offer

Offer "very brief advice" on smoking cessation (http://www.ncsct-training.co.uk/player/play/VBA)

Ask:
"Are you still smoking?" (if yes, or quit <30 days ago, then proceed as below)
Advise:
"Smoking increases the chance that you will have poor results from vascular procedures. Quitting smoking will greatly improve your results."
Act:
"It is difficult to quit smoking, but I want to help you quit. My approach is two-fold:
First, we are going to connect you to a free, telephone-based program, called 1-800-QUITNOW, that will help you quit. They will contact you by phone to help you do this.
Second, I'll write you a prescription for nicotine replacement therapy, which will consist of a patch for daily use, and gum or lozenges for breakthrough cravings.

Step 2: Report
At the end of the surgeon's clinic visit, office staff will assist interested patients in completing a pre-printed fax referral form (in select states the patient must sign the form) and fax completed forms to the quit line. The quit line will contact the patient and assist in smoking cessation.

Fig. 1 – Standardized "very brief advice" as implemented in the Vascular Physician Offer and Report (VAPOR) trial. This protocol describes the stepwise process within vascular surgery clinic of offering smoking cessation advice using "Ask, Advise and Act" technique, followed by helping patients report to telephone-based quitlines.

Download English Version:

https://daneshyari.com/en/article/3026094

Download Persian Version:

https://daneshyari.com/article/3026094

Daneshyari.com