



SMOKING CESSATION STRATEGIES IN CARDIOVASCULAR SURGERY

Dr. V. Hemavathy^{1st}, Mrs. GirijaBhaskaran^{2nd}, Mrs. K.V.R Mydhili^{3rd}

M.Sc. Nursing, M.A, Ph.D ^{1st}, M.Sc. Nursing^{2nd}, , M.Sc., Nursing^{3rd}

Principal ^{1st}, HOD Medical Surgical Nursing^{2nd}, M.Sc student^{3rd}

Principal ^{1st},

Sree Balaji College of Nursing, No7 works Road, Chennai Tamilnadu, India

Abstract

Smoking 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. Cardiovascular surgeons are optimally poised to be able to capitalize on the "teachable moment" of the cardiovascular procedure to encourage smoking cessation. Concise and effective smoking cessation strategies include standardized physician "very brief advice" referral to telephone counselling 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.

Keywords: vascular surgery, smoking cessation, cessation strategies, counselling

Introduction

Smoking is the single most important modifiable risk factor in patients with cardiovascular disease. Tobacco abuse affects a substantial portion of our patients; >30% of all patients with peripheral vascular and cardiac disease are current smokers. 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.

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

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 5% to 8% will pursue or request action-oriented materials on their own. Therefore, most conclude that physician advice to quit tobacco is important and can provide an incremental increase in smoking cessation.

Section snippets

Physician roles in smoking cessation

Physician advice to quit and assistance in the smoking cessation effort maintains an important role in quitting smoking. The US Department of Health and Human Services has set a challenging goal of increasing outpatient visits at which current users receive tobacco and smoking cessation counselling or medications from 22% to 65% by 2017.

For patients who smoke, attention from a physician matters. Within New England vascular surgery practices, smoking cessation rates for those patients offered

An attempt to leverage the “teachable moment” by cardiovascular surgeons

Many have described physician-based interventions, such as those described by the Hennrikus group and others as the “teachable moment”. 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 cardiovascular Surgery multicenter clinical

Physician-based “very brief advice”

Many physicians are skeptical that advice regarding smoking cessation can be effective—especially if delivered in the context of a short clinic visit or telephone interaction. However, broad evidence from careful studies of standardized “very brief advice” — specific transcripts delivered to patients in <30 seconds—have shown demonstrable impact. This “very brief advice” approach was first developed and implemented by the National Health Service in the United Kingdom.

Telephone quitline counselling

Telephone quitline counselling is effective with diverse populations and has broad reach. Clinician referral of patients to this resource is welcomed and encouraged by national guidelines. The magnitude of quitline impact has been measured in a variety of contexts and research strategies,. Because there are few studies with control groups, randomized controlled trial data are primarily based on a single study. Importantly, this study found a positive effect of the addition of

Pharmacotherapy

Multiple forms of pharmacotherapy have been identified to aid in successful smoking cessation. In fact, many options, such as gum or lozenges, remain available for prescription or over the counter (OTC) use. National guidelines encourage prescribing of medications to assist in smoking cessation. These guidelines encourage patients to use OTC agents when appropriate, and also encourage physician prescribing of OTC agents to ensure reimbursement for select patient populations The OTC status

Combined interventions have increased efficacy

Meta-analyses performed in the 2008 update to the US Public Health Service Guideline for the Treatment of Tobacco and smoking Use and Dependence found counselling, quitlines, and NRT were each more effective than placebo. But more importantly, the combination of these interventions is more effective than individual components alone.

While the surgical hospitalization represents a period for most patients when they are forced to be abstinent from tobacco, this alone appears to be insufficient to

Implementation of smoking cessation interventions in vascular surgery practice

As outlined here, the VAPOR pilot trial has been initiated and has nearly completed enrolment. VAPOR is a national, multicenter, cluster-randomized trial of smoking cessation in vascular surgery patients sponsored by a Society for Vascular Surgery Multicenter Clinical Trial Award. While results are pending on the efficacy of the intervention, preliminary data have shown the intervention and control sites to be similar in demographic and smoking-related characteristics, with substantial.

Conclusions

Tobacco and smoking abuse is a prevalent and modifiable risk factor in cardiovascular patients and is directly correlated with surgical outcomes. Smoking cessation must become a priority for cardiovascular surgeons to effectively improve the outcomes and quality of care for their patients. Indeed, cardiovascular surgeons are ideally provided a teachable moment surrounding the vascular procedure to encourage smoking cessation. Advice, telephone counselling, and pharmacotherapy are also important elements of smoking cessation.

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