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What are the most effective ways you can help patients stop smoking?

Evidence-based answer

Brief counseling, nicotine replacement therapy, antidepressants, and varenicline all work well. Physician intervention should begin with routine assessment of smoking status for all patients. Brief (3 minutes or less) smoking cessation counseling improves quit rates (strength of recommendation [SOR]: **A**, Cochrane systematic review). Nicotine replacement therapy (NRT), antidepressants (bupropion and nortriptyline), and the nicotine receptor partial agonist varenicline are effective and should be offered to help smokers quit (SOR: **A**, Cochrane systematic reviews and randomized controlled trials [RCTs]).

Clinical commentary

Ask and act

Physician counseling can help patients stop using tobacco. Medications, including NRT, increase abstinence rates even more. I find the American Academy of Family Physicians' smoking cessation program, "Ask and Act," easier to use than the United States Public Health Services "5 A's" approach, which is described later in this Clinical Inquiry.

Several materials that support the Ask and Act program are available free online at www.aafp.org (click on "Ask and Act" under "Clinical Care & Research"). I have used the prescription sheet for smoking cessation when talking to patients about quitting; the coding reference gives some guidance about charging for cessation counseling. A prescribing guideline for medications, including side effects and contraindications, is also available.

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FAST TRACK

Nicotine replacement increases quit rates

Evidence summary

Brief counseling works

Good evidence suggests that physician-administered smoking cessation counseling lasting less than 3 minutes improves quit rates.[1] A Cochrane analysis of pooled data from 17 randomized trials that compared brief advice to no advice or usual care showed a small but significant increase in the odds of smoking cessation (odds ratio [OR]=1.74; 95% confidence interval [CI], 1.48-2.05).[2] The absolute difference in cessation rate was about 2.5% (number needed to treat [NNT]=40).

Another systematic review of 188 RCTs concluded that an estimated 2% (95% CI, 1%-3%; $P<.001$) of all smokers stopped smoking and did not relapse for as long as a year after receiving advice and

encouragement to quit smoking from their physician in a single routine consultation.[3]

NRT is effective and safe for heart patients

NRT reduces withdrawal symptoms associated with stopping smoking by partially replacing nicotine in the blood. Abstinence rates are superior to placebo based on a Cochrane review (OR=1.77; 95% CI, 1.66-1.88; NNT=20; 95% CI, 17-23).[4] The Cochrane review also concluded that all commercially available forms of NRT are effective for smoking cessation. Also, recent studies have established no association between NRT and further cardiac events.[1]

Antidepressants are good treatment options

Bupropion acts by increasing brain levels of dopamine and norepinephrine and is a nicotine antagonist. A large double-blind, placebo controlled trial compared the relative efficacy of sustained-release bupropion (n=244), nicotine patch (n=244), bupropion plus nicotine patch (n=245), and placebo (n=160).[5] At 1 year, the bupropion groups had higher self-reported point-prevalence abstinence rates (abstinence during the previous 7 days) than the placebo and nicotine-patch-alone groups (bupropion 30%, placebo 16%, nicotine-patch-alone 16%; absolute risk reduction [ARR]=0.14, NNT=7, $P<.001$).

Continuous abstinence (abstinence from quit date) was also higher for the bupropion groups compared with placebo (bupropion 18%, placebo 6%; ARR=0.12; NNT=8; $P<.001$). Adding nicotine replacement to bupropion therapy increased 1-year smoking cessation rates by 5% over bupropion alone but was not statistically significant.

A Cochrane review assessing the efficacy of antidepressants for smoking cessation showed that, when used as monotherapy, bupropion (31 trials; OR=1.94; 95% CI, 1.72-2.19) and nortriptyline (4 trials; OR=2.34; 95% CI, 1.61-3.41) both doubled the odds of smoking cessation.[6]

Another option: Varenicline

Varenicline, a partial agonist at the $\alpha 4\beta 2$ nicotinic acetylcholine receptor, aids smoking cessation by relieving nicotine withdrawal symptoms. A Cochrane meta-analysis concluded that varenicline resulted in significantly greater continuous abstinence at 12 months than placebo (OR=3.22; 95% CI, 2.43-4.27; NNT=8; 95% CI, 5-11).[7]

Recommendations

The US Preventive Service Task Force (USPSTF) strongly recommends that clinicians screen all adults for tobacco use and provide tobacco cessation interventions as needed.[8] The USPSTF's Clinical Practice Guideline for treating tobacco dependence recommends following a 5-step (5 A's) intervention for smoking cessation in patients willing to quit.[1]

1. **A**sk the patient about smoking status at every visit.
2. **A**dvise the patient to stop smoking.
3. **A**ssess the patient's willingness to quit.
4. **A**ssist the patient by setting a date to quit smoking, providing self-help materials, and recommending the use of pharmacologic agents.
5. **A**rrange for follow-up visits. ■

FAST TRACK

Counseling lasting less than 3 minutes improves quit rates

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