

Smoking cessation: What to tell patients about over-the-counter treatments

Kyle Burghardt, PharmD, and Vicki L. Ellingrod, PharmD, BCPP, FCCP

Mr. T, age 56, has major depressive disorder that is well controlled with fluoxetine, 40 mg/d. He has smoked ≥ 1 packs of cigarettes per day for the last 25 years. On a recent visit, he indicates that he has begun using a 21-mg nicotine patch as advised by his pharmacist and that things are going OK, although he has had some “slip ups.” He is on week 7 of his quitting regimen and now is stepping down the patch dosage.

Upon further questioning he says that he has been cutting the 21-mg patches in half to save money. Mr. T also explains that occasionally he has given in to a strong urge to smoke because it was “too much to handle.” He states that he does not think this is a big deal because he uses electronic cigarettes and has heard that these products don’t contain “the bad cancer stuff.” At the end of Mr. T’s visit, he asks for something to help him sleep because he has been unable to sleep consistently and has been having vivid dreams since starting the patch. He also wants to know how to reduce itching from the patch.

Approximately 46 million Americans smoke and cigarette smoking accounts for 1 of every 5 deaths in the United States each year.¹ Since the advent of “Stop Smoking” campaigns, bans on smoking in public buildings, over-the-counter (OTC) nicotine replacement products, and Surgeon General recommendations, discussing smoking cessation with patients has become standard practice.

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Research suggests that treatment to quit smoking should include a combination of pharmacotherapy and counseling, such as cognitive-behavioral strategies, support groups, and quitting hotlines.² Pharmacotherapy consists of OTC nicotine replacement therapy (NRT) products and prescription medications. This article briefly highlights how to counsel patients about using OTC NRT products (*Table, page 44*).²⁻⁵ Visit this article at CurrentPsychiatry.com for a table that highlights prescription smoking cessation agents.

Patches

Nicotine replacement patches are best used for maintenance treatment of nicotine cravings. They deliver a fixed amount



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Practice Points

- Over-the-counter smoking cessation products likely will be the **most appropriate first-line choice** for many individuals before trying prescription products.
- Instruct patients to **avoid smoking while using nicotine replacement therapy** and educate them about the immediate and long-term benefits of quitting.
- Encourage patients to **seek psychosocial counseling** along with pharmacotherapy.
- Urge patients to **engage in other quitting strategies** by referring them to online and telephone resources (*Related Resources, page 45*). Also, encourage them to attend follow-up appointments to assess cessation therapy.

Table

Over-the-counter nicotine replacement therapy products

Product	Dosage	Side effects	Amount of nicotine
Nicotine transdermal patches	For patients who smoked >.5 PPD: 21 mg/d for 6 weeks; 14 mg/d for 2 weeks; 7 mg/d for 2 weeks	Local skin irritation, sleep disturbances, and vivid dreams	7, 14, or 21 mg/d
	For patients who smoked <.5 PPD: 14 mg/d for 6 weeks; 7 mg/d for 2 weeks		
Nicotine polacrilex gum	For patients who smoked \geq 1.25 PPD: 4 mg	Unpleasant taste, jaw soreness, hiccups, dyspepsia, hypersalivation, and nausea (from chewing gum too quickly)	2 or 4 mg per piece
	For patients who smoked <1.25 PPD: 2 mg Weeks 1 to 6: 1 piece every 1 to 2 hours Weeks 7 to 9: 1 piece every 2 to 4 hours Weeks 10 to 12: 1 piece every 4 to 8 hours		
Nicotine polacrilex lozenge	For patients who smoked 1 st cigarette within 30 minutes of waking: 4 mg	Mouth irritation, hiccups, nausea, cough, and insomnia	2 or 4 mg per lozenge
	For patients who smoked 1 st cigarette >30 minutes after waking: 2 mg		

^aAll prices taken from drugstore.com on September 26, 2011

PPD: packs per day

Source: References 2-5

Clinical Point

Combining a nicotine patch with rapid-acting NRT products may help quell acute nicotine cravings

of nicotine over 24 hours.³ Patches have a specially formulated transdermal matrix system and should not be cut. Doing so damages the drug delivery system and could lead to drug evaporation from the cut edges.⁴ Mr. T's psychiatrist advises him not to cut patches but instead purchase the 14-mg patch because he is at this step of the smoking cessation regimen.

Skin irritation caused by adhesive is a common adverse event from nicotine patches. Rotating the location of each patch to a different hairless body area is the best way to prevent or combat skin irritation. If rotating the location of the patch does not relieve irritation, patients can apply a thin layer of an OTC hydrocortisone 1% cream to the affected site 2 to 4 times a day after gently washing the area.⁵ Instruct patients to avoid using occlusive dressings over the topical application.

Nicotine replacement patches also have been reported to cause vivid dreams and insomnia.³ These side effects may be caused by nighttime nicotine absorption, which might be avoided by switching to a

different NRT product or removing the 24-hour patch when going to bed.⁴

Combining treatments

Many patients experience nicotine cravings while using the nicotine replacement patch. Stressful situations and events can trigger a patient's desire for nicotine and withdrawal symptoms that a patch that delivers a continuous amount of nicotine over 24 hours cannot alleviate. Combining different forms of treatment could combat these symptoms.^{2,3,5}

Combination therapy might consist of using sustained-release bupropion or a nicotine patch with rapid-acting NRT products such as a lozenge, gum, nasal spray, or inhaler. In Mr. T's case, clinicians recommend that he use nicotine polacrilex gum in addition to the patch to quell his cravings. Also, he is instructed to stop using electronic cigarettes because they are considered tobacco products, are not regulated by the FDA, and may contain toxic substances.⁶

Instruct patients who use nicotine gum to employ the "chew and park" method.⁴

ONLINE
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Visit this article at
CurrentPsychiatry.com
for a table describing
prescription smoking
cessation agents

Cost ^a	Comments
21 mg: \$32 for 14 patches 14 mg: \$32 for 14 patches 7 mg: \$19 for 7 patches	Alternate sites. Do not cut. Do not leave on skin for longer than life of patch (24 hours). Washing, bathing, swimming are OK. Remove patch if undergoing MRI because of reports of burns
4 mg: \$50 for 170 pieces 2 mg: \$50 for 170 pieces	Use “chew and park” method. As part of combination therapy, use only as needed. No more than 24 pieces per day; use caution with patients with jaw or mouth conditions
4 mg: \$43 for 72 lozenges 2 mg: \$43 for 72 lozenges	Dissolve lozenge in mouth for 20 to 30 minutes. Rotate lozenge to different parts of mouth occasionally. Do not chew. No more than 5 lozenges in 6 hours or 20 per day. Same taper schedule as nicotine gum

First, they should chew the gum very slowly until they notice a minty taste or tingling feeling, then “park” the gum between the cheek and gums for 1 to 2 minutes to allow nicotine to be absorbed across the gum lining. After 2 minutes or when tingling ceases, patients should slowly resume chewing until a tingling or minty taste returns and then “park” the gum again in a different area of the gums. Tell patients to repeat the “chew and park” method until there is no more taste or tingling (approximately 30 minutes). Explain that chewing the gum too fast may result in nausea or lightheadedness and patients should refrain from eating or drinking 15 minutes before or while using the gum. Mr. T is instructed to use the gum only when the urge to smoke is overwhelming, and not regularly.

The nicotine polacrilex gum is more viscous than ordinary chewing gum and may stick to or possibly damage dental work such as fillings, dentures, crowns, and braces. An acceptable alternative is the nicotine polacrilex lozenge. Advise patients who want to try lozenges to:

Related Resources

For patients

- Treat Tobacco. www.treattobacco.net.
- Smokefree.gov mobile application. <http://smokefree.gov/apps>.
- Medline Plus. Quitting smoking. www.nlm.nih.gov/medlineplus/quitingsmoking.html.
- Quit for Life Program. www.quitnow.net.
- American Lung Association. Stop Smoking. www.lungusa.org/stop-smoking.

For clinicians

- Agency for Health Research and Quality. Treating tobacco use and dependence: 2008 update. www.ahrq.gov/path/tobacco.htm#clinicians.

Drug Brand Names

Bupropion SR • Zyban,	Fluoxetine • Prozac
Wellbutrin SR	Varenicline • Chantix

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- place the lozenge in the mouth and allow it to dissolve slowly over 20 to 30 minutes (during this time patients may experience a tingling sensation as nicotine is released)

- rotate the lozenge to different areas of the mouth every few minutes to lessen irritation

- avoid chewing or swallowing the lozenge because doing so will lead to improper release of nicotine and side effects, including nausea, hiccups, and heartburn

- refrain from eating or drinking 15 minutes before or while using the lozenge.

For many patients, the breadth of pharmacologic agents available for smoking cessation has made quitting a more attainable goal. OTC smoking cessation products are available in most drug stores, which gives smokers easy access to taking this important step. Counseling patients on the proper use of OTC products may help them successfully stop smoking.⁷

Although a patient’s medical history, including cardiac status, must be considered before starting specific agents, in many instances patient preference is the prevailing factor when choosing therapy. Often, the risks of continued smoking outweigh the risks of using smoking cessation products. OTC smoking cessation products may

Clinical Point

Tell patients to avoid electronic cigarettes, which are tobacco products and may contain toxic substances

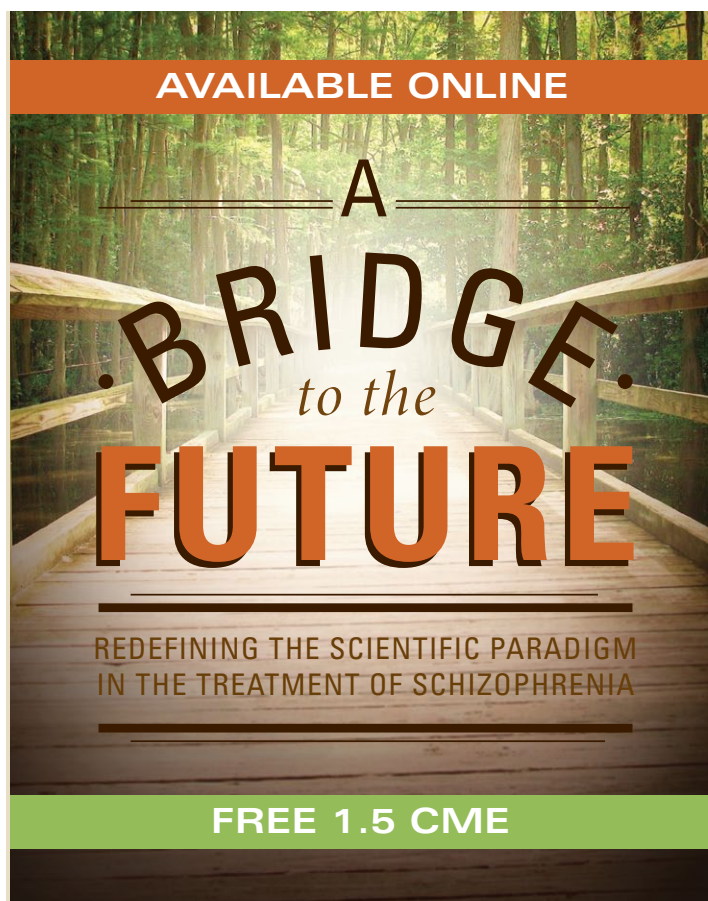
be an appropriate first-line treatment for many individuals before trying prescription medications, such as bupropion or varenicline.

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Clinical Point

Nicotine polacrilex gum is more viscous than ordinary chewing gum and may stick to or damage dental work



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Table

Prescription smoking cessation products^a

Product	Dosage	Side effects	Amount of nicotine	Cost ^b	Notes
Nicotine inhaler	6 to 16 cartridges/d	Throat/mouth irritation and cough	10 mg cartridges deliver 4 mg of nicotine	10 mg inhaler with 168 cartridges: \$213	Vapor, not smoke, is released and deposited in mouth. Similar mechanism of action to nicotine gum. Continuously puff for ~20 minutes. Gradually reduce dosage over 12 weeks. Helps with patients who need the “action” of smoking. Caution in patients who have a history of bronchospastic disease because of potential airway irritation
Nicotine nasal spray	10 mg/ml bottle 8 to 40 doses/d One dose is a spray to each nostril	Initial (~10 week) watery eyes, coughing, and nasal and throat irritation	0.5 mg/spray	10 ml bottle: \$186	Fastest delivery of nicotine vs other products. Tilt head back slightly when delivering spray. Do not sniff, swallow, or inhale through the nose. Continue treatment for 3 to 6 months with an individualized reduction in usage
Bupropion SR	150 mg/d for 3 days, then 300 mg/d for 7 to 12 weeks or longer	Weight change, constipation, confusion, headache, and insomnia	N/A	60 tablets: \$106	Patients should stop smoking during the second week of treatment. Combination treatment has achieved higher cessation rates. Avoid bedtime dosing to minimize insomnia (eg, 7 AM and 3 PM dosing strategy). Avoid in patients with seizure disorders
Varenicline	Days 1 to 3: 0.5 mg/d Days 4 to 7: 1 mg/d Day 8 to end of treatment: 2 mg/d Start treatment 1 week before quitting and continue for 3 to 6 months	Constipation, flatulence, nausea, vomiting, insomnia, and headache	N/A	Starting pack: \$179 Continuing pack: \$177	Partial agonist of nicotinic acetylcholine receptor. Superiority to placebo has been shown but more studies are needed to show superiority to NRT. Safety and efficacy of combination therapy has not been established. Pack titrates dosage to 2 mg/d to decrease nausea. Take with water and food. Has a “black-box” warning for serious neuropsychiatric events, including suicidal ideations and behavior

^aOther medications studied as smoking aids include nicotine vaccine (clinical trial stage), selegiline, bromocriptine, topiramate, nortriptyline, and clonidine

^bAll prices taken from drugstore.com on September 26, 2011

NRT: nicotine replacement therapy

Source: References 2-5