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Tobacco Use

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- Cigarettes are the leading factor contributing to preventable death in the United States. Cigarettes are associated with more than 400,000 deaths each year, which is more than alcohol, illegal drugs, car crashes, homicides, suicides, and AIDS combined. For men and women, smoking is known to cause cancer of the lung, larynx, oral cavity, esophagus, pancreas, bladder, and kidney; it also causes coronary heart disease, atherosclerotic peripheral vascular disease, chronic obstructive pulmonary disease, intrauterine growth retardation, and low birthweight. Smoking also contributes to cervical cancer, infertility, peptic ulcer disease, and skin wrinkling. Smokeless tobacco uses causes oral cancer and other oral lesions. Environmental tobacco smoke causes lung cancer in nonsmoking adults and respiratory illness in children. Lung cancer deaths have surpassed breast cancer deaths as the most common fatal cancer among women. Women who smoke face a risk of lung cancer 12 times the risk of nonsmoking women.

I. Clinical Interventions

A. Ask about smoking at every opportunity

- Ask all patients about smoking
- Advise smokers to stop
- Assist their efforts with self-help materials, a quit date, and possibly nicotine gum or the transdermal patch
- Arrange follow-up

B. Assist the patient to Stop Smoking

Good Reasons to Stop Smoking

For Teenagers

Bad breath
Stained teeth
Cost
Lack of independence-
Controlled by cigarettes
Sore throats
Cough
Dyspnea (might affect sports)
Frequent respiratory infections

For Pregnant Women

Increased rate of spontaneous
Abortion and fetal death
Increased risk of low birth-

For Asymptomatic Adults

Twice the risk of heart
disease
Six times the risk of
emphysema
Cost of cigarettes
Cost of sick time
Bad breath
Less convenient and so-
cially unacceptable
Wrinkles

For Symptomatic Adults

Upper respiratory infection
Sore throat

Weight

Gum disease
Dyspnea

For Parents

Increased coughing and
respiratory infections
among children of smokers
Poor role model for child

Cough
Angina
Claudication

For New Smokers

Easier to stop now

For Any Smoker

Money saved by stopping
Feel better
Improved ability to
Exercise
More likely to enjoy
retirement, grandchildren

For those patients who do not want to stop, nagging rarely helps. Physicians must accept the patient's decision. For those patients who express a sincere desire to stop smoking, the physician should help them.

C. Nicotine Replacement Therapy

Nicotine replacement therapy should be considered for almost all patients who wish to stop smoking. In clinical trials, nicotine replacement products and bupropion each roughly doubled the rates of successful cessation when combined with advice and information from a physician or other health professional.

Transdermal Nicotine: All patches should be applied once every 24 hours to a non-hairy, clean, dry skin site on the upper torso or arm. Skin sites should be changed daily, and the same site not reused for at least one week, a higher initial dose of nicotine (21 to 22 mg for the 24-h patches, 15 mg for the 16h patch) for the first few weeks of treatment. Manufacturers commonly recommend 6 to 8 weeks of treatment. Patients weighing less than 100 lb may begin treatment with a lower-dose patch.

Side effect of the nicotine patch is mild, transient itching or burning after application. Erythematous, sometimes accompanied by edema, may also occur at the patch site. The nicotine patch is contraindicated for patients who have serious arrhythmias or severe or worsening angina, or have had a recent myocardial infarction.

An alternative form of nicotine replacement is **nicotine polacrilex gum**. It should be chewed intermittently and then held in contact with the oral mucosa, where the nicotine is absorbed.

Nicotine Nasal Spray: The nicotine nasal spray delivers 0.5 mg of nicotine with every spray. Patients use one spray in each nostril every 1 to 2 h, to a maximum

of 40 doses per day, for eight weeks of initial treatment, followed by a gradual tapering for another 4 to 6 weeks. Nasal irritation occurs in nearly all patients during the first two days.

Nicotine Inhaler: Patients use the inhaler frequently, taking about 80 inhalations over 20 minutes. Each cartridge of the inhaler delivers 4 mg of nicotine, and 6 to 16 cartridges are used per day for up to 12 weeks. Gradual tapering can follow if needed. Side effects include mouth and throat irritation.

The antidepressant **bupropion** has also been approved as a Pharmacologic aid to smoking cessation. Bupropion hydrochloride is provided in sustained-release tablets of 150 mg. One tablet daily is used for 3 days, then increased to 2 per day, and used for 7 to 12 weeks. Over 300 mg per day should not be prescribed for smoking cessation. Bupropion is contraindicated in patients with seizure disorders, a history of anorexia nervosa or bulimia, and in patients who took a monoamine oxidase (MAO) inhibitor in the previous 14 days.

Arrange Follow-up Visits: This monitoring may include a letter or telephone call from the office staff just before the quit date. Most relapses occur in the first weeks after cessation and a person who comes to the office after being a nonsmoker for 1 to 2 weeks has a much-improved chance of remaining abstinent.

It is important to set up a second follow-up visit with the physician or staff member in 1 to 2 months. Studies show that the quit rate improves as the number of follow-up visits increase.

Weight Gain: Most patients gain less than 10 pounds after cessation. Some patients gain no weight after cessation, but a small percentage gain large amounts of weight. Recommend to weight-conscious smokers that they exercise more, even if this exercise is nothing more than walking.

Preventing Tobacco Use among Youth: Most smokers become addicted during childhood and adolescence so advice from physicians during these periods is critical. Although any adolescent is a potential smoker, those at highest risk of becoming addicted have a smoking parent, low self-esteem, poor academic performance, and engage in other risky behaviors such as alcohol and drug use.

When a rapport with a young person is established, a physician can provide reasons for avoiding tobacco use that are relevant to an adolescent and can also help the patient practice refusal skills. Adolescents who are already regular smokers should be advised and assisted like an adult. However, adolescents are often much more concerned with the immediate effects of smoking, such as odors and poor athletic performance, and often are not influenced by risks of cancer and other diseases, which might not appear for many years.

Children of any age should be protected from exposure to environmental tobacco smoke. Parents who smoke should be advised to stop and to keep their children in smoke-free environments, both at home and at daycare and other settings.