How to help your patient quit smoking

Christopher M. Johnson MD, PhD
Outline

• Smoking and its effects on IBD
  – CD
  – UC
• Clinical interventions
• Pharmacotherapy
• Resources
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Smoking and IBD

• Clear link between smoking and IBD
• Mechanisms unclear
  – Alteration of microbiota
  – Integrity of intestinal epithelium
  – Changes in immune system function
  – Epigenetic changes
Smoking and IBD

- Cigarette smoke contains ~4,500 components
- ~150 are thought to be carcinogenic/toxic to humans
  - Polycyclic aromatic hydrocarbons
  - Nitrosamines
  - Phenolic compounds
  - Alkaloids
  - Aldehydes
  - Dioxins
  - Cadmium, arsenic
- Many have immune modulating activity (nicotine, dioxin, arsenic)
- Difficult to pinpoint which compound(s) have effect on IBD
Smoking and Crohn’s

• Independent risk factor for development of CD
• Study of 339 sibling pairs with IBD:
  – 89 dichotomous for smoking status
  – 23 dichotomous for IBD diagnosis (CD vs UC)
  – 91% of cases: smoker had CD
• Meta-analysis of 9 studies: OR 1.76 to develop CD

Bridger et al, Gut 2002
Mahid et al, Mayo Clinic Proc 2006
Smoking and Crohn’s

• Associated with severe, refractory disease
• Smoking increases likelihood of perianal disease, and stricturing/penetrating complications
  – Spanish national IBD database (3,224 patients)
  – Current smokers:
    • Less likely to have colonic disease (7.9% vs 10.9%)
    • More likely to have perianal disease (29.5% vs 19.3%)
    • More likely to have stricturing disease (22.5% vs 19.3%)
• Smoking increases likelihood of surgery and repeat surgery

Nunes et al, APT 2013
Sutherland et al, Gastro 1990
Smoking and UC

• Smoking is protective, associated with milder disease course
  – 1981 survey of 230 UC pts, 230 matched controls, and 190 CD patients
  – Current smoking: CD – 42%, controls - 44%, UC – 8%

• Cohort study from Hungary
  – 1420 IBD patients
  – 14.9%-UC, 47%-CD, 36%-general population

• Meta-analysis: Smokers less likely to develop UC, OR 0.58 [0.45-.75]

Lakatos et al, IBD 2013
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Smoking Statistics

- 21% of adult Americans smoke (46 million)
- Pediatrics: every day there are 4,000 new smokers ages 12 – 17
- Largest avoidable source of mortality; each year there are 435,000 deaths attributable to smoking in the US
- Heart disease, stroke, pregnancy complications, COPD......

CDC 2008  
McGinnis et al. JAMA 1993
US Dept HHS
Smoking Statistics

• Costs of tobacco:
  – $96 billion annually in direct medical expenses
  – $97 billion in lost productivity
  – Estimated cost to society per pack: $7.18
  – Combined cost to society plus smoker and family: $40.46
  – Potential savings to Medicaid if participants quit smoking: $9.7 billion after 5 years

CDC 2007
Sloan et al, et al MIT 2004
Treatment of Tobacco Abuse

• Providers often fail to treat tobacco abuse consistently

• Barriers
  – Clinician knowledge
  – Time
  – Lack of insurance coverage
## Use the Five A’s

<table>
<thead>
<tr>
<th>Use the Five A’s</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>ASK about tobacco use</strong></td>
<td>Identify and document tobacco use status for every patient at every visit</td>
</tr>
<tr>
<td><strong>ADVISE to quit</strong></td>
<td>In a clear, strong, personalized manner, urge every tobacco user to quit</td>
</tr>
<tr>
<td><strong>ASSESS willingness to</strong></td>
<td>Is the tobacco user willing to make a quit attempt this time?</td>
</tr>
<tr>
<td><strong>ASSIST in a quit attempt</strong></td>
<td>For the patient willing to quit, offer medication and provide or refer for counseling or additional treatment to help the patient quit</td>
</tr>
<tr>
<td><strong>ARRANGE follow-up</strong></td>
<td>For the patient willing to quit, arrange for follow-up contacts, beginning with the first week after the quit date</td>
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</tbody>
</table>

For patients unwilling to quit at the time, provide interventions designed to increase future quit attempts.

**For patients unwilling to make a quit attempt at the time, address tobacco dependence and willingness to quit at the next clinic visit.**

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ASK

• Should implement standard system for documenting tobacco use at every visit

• Why?
  – Providers can make a difference
  – Intensity of intervention correlates with likelihood of success (>10 minutes may be superior)
  – Even if quit attempt not made, clinician advice enhances motivation for future quit attempts
  – Patient satisfaction is higher when provider advises and assists with tobacco cessation

• Advice should be:
  – **Clear**—“It is important that you quit smoking now, and I can help you.” “Cutting down while you are ill is not enough.” “Occasional or light smoking is still dangerous.”
  – **Strong**—“I need you to know that quitting smoking is the most important thing you can do to protect your health now and in the future. The clinic staff and I will help you.”
  – **Personalized**—Tie tobacco use to current symptoms and health concerns, its social and economic costs, and the impact of tobacco use on children and others in the household. “Continuing to smoke makes your asthma worse, and quitting may dramatically improve your health.” “ Quitting smoking may reduce the number of ear infections your child has.”

ASSESS willingness to quit

• “Are you willing to try to quit?”
  – If yes, provide assistance
    • Quit plan
    • Recommend approved medication
    • Supplementary materials, including info on quit lines
  – If no, provide intervention shown to increase chances of future quit attempts
    • “5 R’s”
    • Relevance, Risks, Rewards, Roadblocks, Repetition
“5 R’s” – increasing motivation to quit

- **Relevance**
  - Why quitting is important to them (specific to their medical problems, family situation, etc)

- **Risks**
  - Emphasize short and long-term risks (symptoms, increased risk for tobacco-related diseases, pregnancy)

- **Rewards**
  - Health, financial, food tastes better, home/car/breath smell, improved appearance, example for children

- **Roadblocks**
  - Withdrawal symptoms, fear of failure, wt gain, being around other tobacco uses, depression

- **Repetition**
  - Intervention should be repeated at every visit
  - Emphasize that most people need repeated attempts before success

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Pharmacotherapy for Smoking Cessation

- All smokers trying to quit should be considered for pharmacotherapy
- Possible exceptions (insufficient evidence):
  - Pregnant women, smokeless tobacco, light smokers (<10 cigarettes per day), adolescents
- 7 FDA-approved medications:
  - Bupropion SR, Varenicline, nicotine gum, inhaler, lozenge, nasal spray, patch
- No clear guidelines on choice of 1\textsuperscript{st} line medication
- 2\textsuperscript{nd} line: clonidine, nortryptyline
- Combinations:
  - Combining nicotine patch with as-needed NRT or bupropion SR is more effective than patch alone
  - NRT plus varenicline – not recommended (nausea, headaches)

Special considerations

• History of depression
  – Bupropion SR, nortriptyline, NRT are safe
  – Don’t use bupropion in patients with bipolar (patch ok)
• Concerned about weight gain
  – Bupropion SR and NRT may delay weight gain
• Cardiovascular disease
  – NRT is safe
  – Packaging recommends caution in patients with “acute” cardiovascular disease
• Pregnancy
  – Counseling is best option
  – NRT “benefits outweigh risks” (previously category D)
  – Bupropion and Varenicline “caution advised”
• Adolescents
  – NRT safe
  – Little evidence to support pharmacotherapy – not recommended

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ASK and ACT
A TOBACCO CESSATION PROGRAM

Stop Smoking Guide

Pasos para ayudarle a dejar de fumar

When your child is sick, you worry.

www.askandact.org
Smokefree Text Messaging Programs

Smokefree.gov offers free text messaging programs that give 24/7 encouragement, advice, and tips for becoming smokefree and being healthier.

Find the program that meets your needs. You can sign up or opt-out at any time.

SmokefreeTXT

- SmokefreeTXT is for adults who want to quit smoking.
- The program lasts 6-8 weeks, depending on your quit date. You will receive 3-5 messages per day.
- The text messages provide tips, advice, and encouragement to help you overcome challenges and stay motivated.
- Use the keywords for extra help at any time. Text CRAVE, MOOD, or SLIP to 47848.

[Sign Up Now]
Thank you!

I quit!