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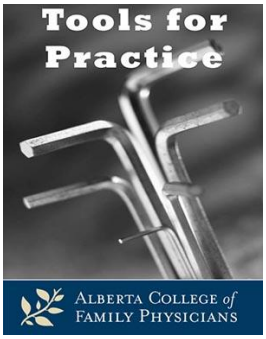
Reviewed: December 17, 2017
Evidence Updated: None
Bottom Line: Unchanged
First Published: May 10, 2010



Pharmacotherapy for Smoking: What works and what to consider (PART I)?

Clinical Question: In patients ready to make a smoking cessation attempt, how effective are registered first-line medications and what are the potential concerns?

Bottom-line: There are four first-line options of nicotine replacement therapy (NRT) (gum, patch, lozenge or inhaler) and all improve the chance of abstinence from smoking. For every 17 patients treated with NRT, one will remain abstained from smoking at six months. Adverse events are low but supportive follow-up will allow monitoring and can improve cessation.

Evidence:
Part I reviews Nicotine Replacement Therapy (NRT) and related issues
Part II discusses antidepressants and varenicline

- NRT: Cochrane systematic review[1] of 150 randomized controlled trials (RCTs):
  - Overall Risk Ratio (RR) of abstinence: 1.60 (1.53 to 1.68).
    - Gum: 1.49 (1.40 - 1.60, 55 trials).
    - Patch: 1.64 (1.52 - 1.78, 43 trials).
    - Inhaler: 1.90 (1.36 - 2.67, 4 trials).
    - Lozenge: 1.95 (1.61 - 2.73, 6 trials).
  - Some evidence combining rapid-acting NRT with patch can offer small advantage over monotherapy: RR 1.34 (1.18-1.51, 9 trials).
  - There is no difference in efficacy between NRT and bupropion: RR 1.01 (0.87-1.18).
  - Adverse events:
    - Local irritation relates to the type of product.
    - No evidence that NRT increases myocardial infarctions.
- Assuming placebo cessation rates of 10% (mean across studies), the number needed to treat (NNT) for NRT therapy is approximately 17 (range 15-19).

Context:

- Smoking cessation is the most effective preventive maneuver for conditions including COPD, cancer and cardiovascular disease.
    - For example, an RCT[2] of aggressive smoking cessation intervention for 209 patients after CCU admission 2 years later resulted in:
        - 39% quitting versus 9%.
        - 3% mortality versus 12%, for a 9% absolute reduction (NNT 11).
        - For comparison, ASA provides a 1.4% reduction (NNT 72) in mortality in a similar population and time frame.[3]
- Pharmacotherapy is safe and effective in a broad range of populations, including the mentally ill.
- Combining counseling and support with pharmacotherapy improves outcomes.[1]

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3. Berger JS, Brown DL, Becker RC. Am J Med. 2008; 121(1):43-9

Tools for Practice is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practising family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. Each article is peer-reviewed, ensuring it maintains a high standard of quality, accuracy, and academic integrity. If you are not a member of the ACFP and would like to receive the TFP emails, please sign up for the distribution list at http://bit.ly/signupfortfps. Archived articles are available on the ACFP website.