Algorithm for Tailoring Pharmacotherapy in Primary Care Setting


ADVISE: Your patient to quit. As your healthcare provider, I am concerned about your tobacco use and advise you to quit. Would you mind if we spent a few minutes so that I can better understand your smoking addiction?

YES: Assess readiness

NO: If you change your mind, I am willing to discuss this further

ASSESS: Readiness to quit. 1. Given everything going on in your life right now, how important is it for you to quit smoking? 2. How confident are you that you can quit smoking? Scale each question 0-10.

Desire to quit / confidence > 5

Desire to quit / confidence ≤ 5

ASSIST: Cold Turkey Supportive counselling arrange follow-up

Reduce to Quit See reverse

Pharmacotherapy +/- Counselling If patient smokes ≥ 10 cigarettes/day, offer pharmacotherapy

First line pharmacotherapy

Nicotine Replacement Therapy (NRT) OTC

Delivery: Transdermal (patch), Oral mucosa (gum, lozenge, mouth spray), Oropharynx (inhaler)

Dose:
- Patch: Different doses are tapered down over 12 weeks
- Inhaler: Cartridge = 10mg nicotine + 1mg menthol, puff PRN, max 12d
- Gum: Nicorette® (2.4mg) Thrice® (1.2mg) max 20d
- Lozenges: 2mg (<25 cigarettes/d) and 4mg (>25 cigarettes/d) max 20d
- Mouth spray: 1mg (per spray), 1-2 sprays 30-60 min, max 4 sprays/hr.
- Quit Date: Same day as starting NRT

How to use:
- Patch: apply to non-hairy areas for 16 or 24 hours
- Gum, lozenge: Chew slowly until taste is strong, then place between cheek and gum, wait till fades then repeat
- Inhaler: Insert cartridge into cylinder and draw-in (most ends up in oropharynx)
- Mouth Spray: spray towards inside of your cheeks/under the tongue, avoid lips. Avoid swallowing for a few seconds after spraying.

Common side effects:
- Patch: Abnormal dreams/insomnia (remove before bed)
- Inhaler, gum, lozenge, mouth spray: mouth irritation/dysgeusia

Caution:
- Inhaler: Still has nicotine when finished dispose properly
- Patch: Actually OK if smokes, leave patch on and try to quit again

Advantages:
- Quit rate is double placebo, patch is the most effective NRT and is safe in stable cardiac disease

Varenicline (Champix®)

Dose: Day 1 to 3 0.5mg PO QD. Day 4 to 7 0.5mg PO BID. Then 1mg PO/BD at day 8 to 12/24 weeks

Quit rate: 7-14 days (up to 35) after starting

Common side effects: Nausea, bad dreams, insomnia

Caution: Unstable psychiatric illness, serious neuropsychiatric events (may be worsened by smoking or alcohol), risk of increased cardiac events in patients with heart disease, Stevens-Johnson, angioedema, erythema multiforme, reduce dose in renal disease, avoid driving/machinery if sedated

Advantages: No drug interactions except NRT (may increase adverse events), most effective medication quit rate is triple placebo

While varenicline has the highest quit rate, therapy should be tailored to the individual's needs and preferences.

Bupropion (Wellbutrin SR®, Zyban®)

Dose: 150mg SR PO qam X 3 then BID 7-12 weeks

Quit rate: 7-10 days after starting

Contraindicated: Seizure disorders, bulimia/anorexia (recent or remote), heart failure, MAOI

Common side effects: Dry mouth, constipation, agitation, insomnia, headache, tremor

Caution: Seizures, mood changes, suicide, drug interactions

Advantages: Minimal weight gain, helps depression, can use with NRT, as effective as NRT

Product Monograph Update: Through consideration should be given to nicotine replacement therapy alone prior to prescribing varenicline or bupropion.

ARRANGE: Follow up 1-4 weeks post quit date

Full response

Partial response Assess medication adherence Adjust dose Increase counselling

combination Therapy

Bupropion SR + Varenicline* No Varenicline with NRT

*Currently there are no randomized controlled trials

Bupropion SR + NRT
- Patch (15mg) + Gum (2mg)
- Patch + Inhaler
- Patch + Lozenge

Two forms of NRT

Different First Line Therapy

Modify pharmacotherapy

Combination Therapy

Bupropion + Patch
Bupropion + Gum

If any of these fail then back to ASSESS

Motivational Interviewing

Explore the 5 Rs using reflective listening: Relevance, Rewards, Risk, Roadblocks, Repetition
Reduce to Quit

Step 1: (0-6 weeks) Smoker sets a target for no. of cigarettes per day to cut down (at least 50% recommended) and a date to achieve it by. Smoker uses gum to manage cravings.

Step 2: (6 weeks up to 6 months) Smoker continues to cut down cigarettes using gum. Goal should be complete stop by 6 months. Smoker should seek advice from HCP if smoking has not stopped within 9 months.

Step 3: (within 9 months) Smoker stops all cigarettes and continues to use gum to relieve cravings.

Step 4: (within 12 months) Smoker cuts down the amount of gum used, then stops gum use completely (within 3 months of stopping smoking).

Glossary

BID: Twice a day
COPD: Chronic obstructive pulmonary disease
d: Days
lbs: Pounds
LU: Limited use
NRT: Nicotine replacement therapy
MAOI: Monoamine oxidase inhibitor
Max: Maximum
ODB: Ontario drug benefit
OTC: No prescription needed
PO: By mouth
PRN: As needed
qam: Every morning
℞: Requires a prescription
SR: Slow release
Wt: Weight

References

Information provided is evidence-based but may not be approved for use in certain regions. Refer to your local regulatory authority for approved indication, guidelines, and updated safety information.


4. CAN-ADAPTT. Canadian Smoking Cessation Clinical Practice Guideline. Toronto: Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment, Centre for Addiction and Mental Health; 2011.

5. CAN-ADAPTT. Canadian Smoking Cessation Clinical Practice Guideline: Pharmacotherapy section. Toronto: Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment, Centre for Addiction and Mental Health; 2012.

CAN-ADAPTT Summary Statements

Counselling and Psychosocial Approaches

1. Combining counselling and smoking cessation medication is more effective than either alone, therefore both should be provided to patients/clients trying to stop smoking where feasible. (1A)

CAN-ADAPTT Pharmacotherapy Guideline

1. Offer efficacious pharmacotherapy to every patient who smokes 10 or more cigarettes daily and is willing to make a quit attempt. (1A)

2. Health care providers should tailor smoking cessation pharmacotherapy to the patient’s clinical needs and preferences. (1C)

3. Varenicline improves smoking cessation rates at 6 and 12 months compared to placebo. (1A)

4. Bupropion improves smoking cessation rates at 6 months (1A) and may improve smoking cessation rates at 12 months (1B) compared to placebo.

5. Nicotine patch improves smoking cessation rates at 6 and 12 months compared to placebo. (1A)

6. Nicotine gum may improve smoking cessation rates at 6 and 12 months compared to placebo. (1B)

7. Nicotine lozenge may improve smoking cessation rates at 6 and 12 months compared to placebo. (2C)

8. Nicotine nasal spray improves smoking cessation rates at 6 and 12 months compared to placebo. (2C)

9. Nicotine oral inhaler may improve smoking cessation rates at 6 and 12 months compared to placebo. (2C)

10. Nicotine sublingual tablet may improve smoking cessation rates at 6 and 12 months compared to placebo. (2C)

11. There is insufficient evidence to make a recommendation regarding the use of Clonidine for smoking cessation. (C)

10. There is insufficient evidence to make a recommendation regarding the use of Nortriptyline for smoking cessation. (C)

See Table 1 of the CAN-ADAPTT Guideline for Level of Evidence Summary Table