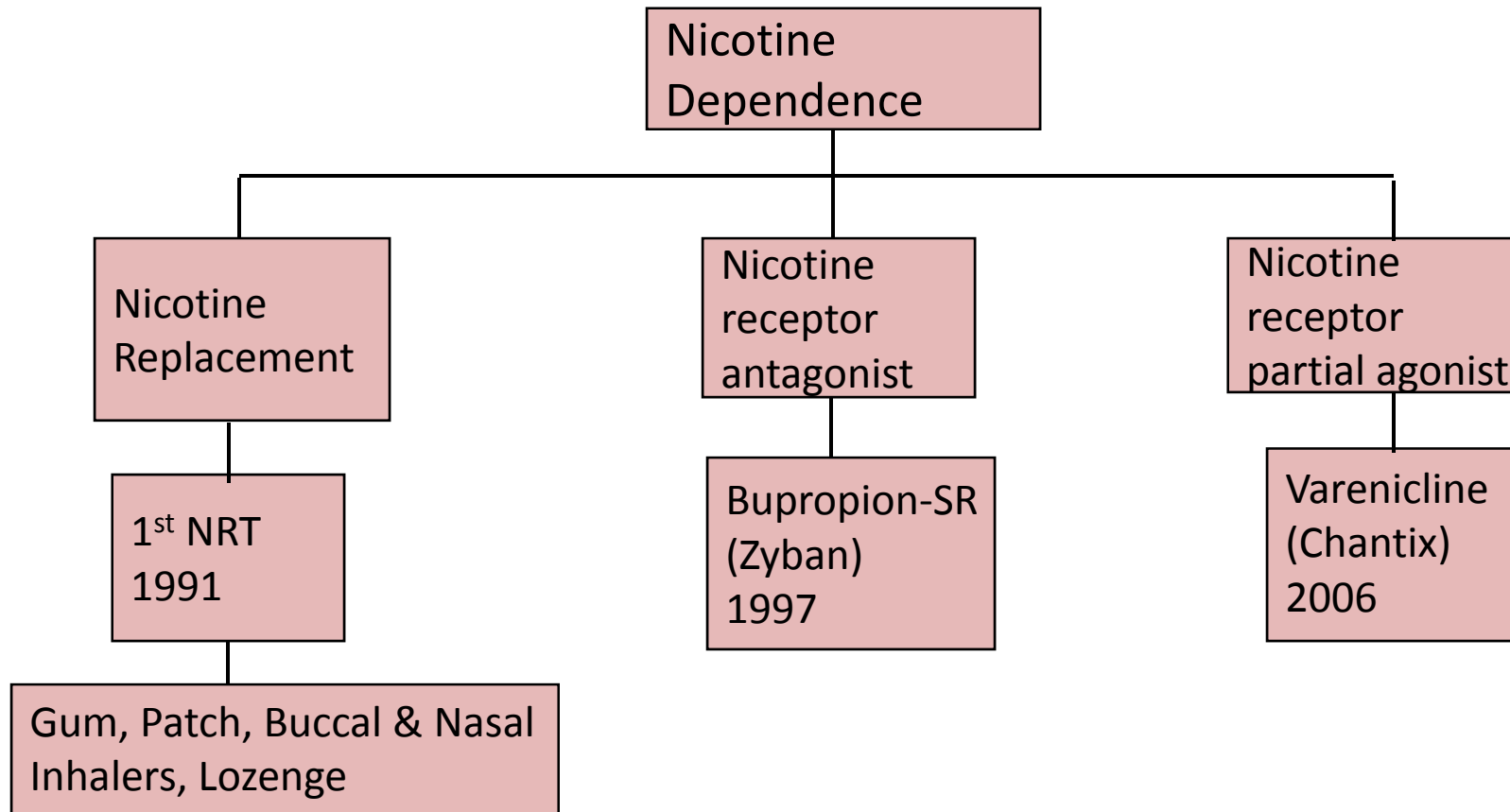


Overview of First-Line Tobacco Cessation Medication

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Medications for Nicotine Dependence (FDA approved as of 2016)



First-Line Medications

Nicotine Replacement	Non-Nicotine
Patch/Gum/Lozenge	Bupropion SR or XL
Nasal Spray	Varenicline
Nicotine Inhaler	

Second-Line Medications

- Nortriptyline* (TCA, Norepinephrine blocker)
- Clonidine* (Antihypertensive, presynaptic alpha-2 agonist)

*

Clinical Practice Guideline: Treating Tobacco Use and Dependence U. S. Department of Health and Human Services Public Health Service, June 2008

Combination Therapy

Combination Therapy

Patch + episodic NRT (gum or lozenge)

Bupropion + episodic NRT (gum or lozenge)

Bupropion + Chantix (try low dose)

Chantix + Bupropion (maybe NRT)

Nicotine Replacement Medications



Nicotine Replacement Therapy

Mechanism of Action:

- Full agonist on nicotine receptors
- Reduces withdrawal symptoms and craving
- May provide some positive effects of nicotine
 - Desirable mood
 - Improved attention

Nicotine Replacement Therapy Continued

- Replaces oral/handling aspects of smoking behavior (gum, lozenge, spray, inhaler)

Patch - Dosing Guideline

Nicotine PATCH (Nicoderm CQ)

21 mg, 14 mg, or 7 mg

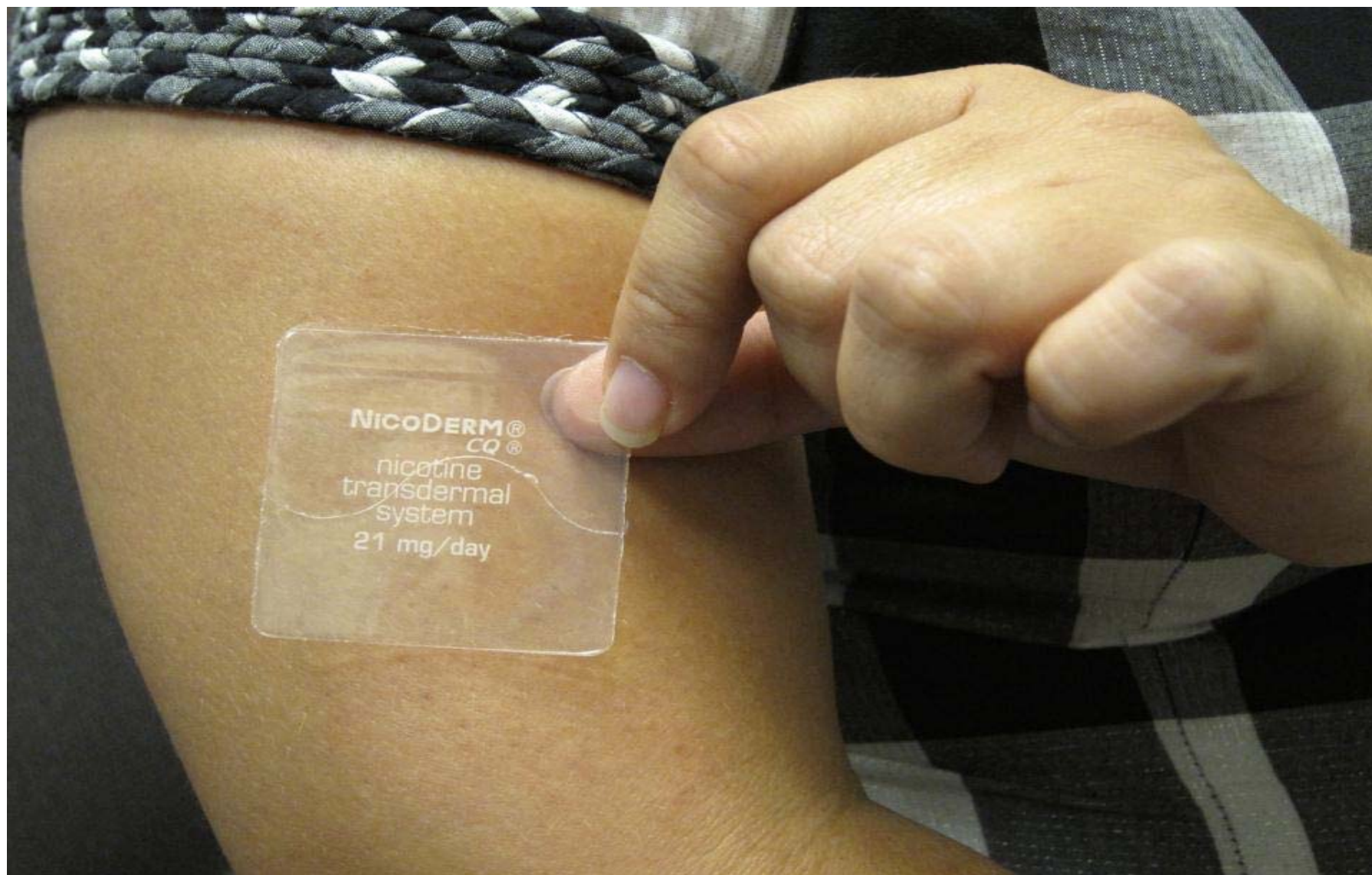
Dose	1 patch every 24 hours
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Start	21 mg patch if ≥ 10 cig/day 14 mg patch if < 10 cig/day
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Duration	6-12 weeks
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Side-effects	Patch: skin irritation, headaches, insomnia
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Instructions	-Apply 1 patch daily in the morning -Put on a clean dry hairless area (above elbows on the arms, above the waist and below the neck on chest and back) -Apply to a different location each day to prevent skin irritation -If sleep disturbances or bad dreams develop, may remove at bedtime, apply fresh patch in AM -If localized redness or irritation occurs, may use OTC steroid cream
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Gum - Dosing Guideline

Gum	
2 mg/ 4 mg	
Dose	1 piece every 1-2 hrs. Min: 8/day, max: 18/day
Duration	6-12 weeks
Side-effects	Sore throat, hiccups, nausea
Instructions	- Chew slowly until tingling sensation - Then “park” between teeth or in the cheek - Slowly and intermittently “chew and park for 15-20 minutes” - Avoid eating and drinking 10 minutes before and during use



Lozenge - Dosing Guideline

Lozenge or Mini- Lozenge	
2 mg, 4 mg	
Dose:	1 Lozenge every 1-2 hours, Min 8/day, Max 18/day
Duration:	6-12 weeks
Side-effects	Sore throat, hiccups, nausea
Instructions:	-Allow to dissolve slowly -Do not bite or chew -Park between cheek and gum -Avoid eating or drinking 15 minutes before and during use



Inhaler - Dosing Guideline

Nicotrol Inhaler	
10 mg	
Dose:	1 Cartridge every 2 hrs. Min 20 puffs, max of 80 puffs per cartridge. Min 8 cartridge, max 20 cartridge/day
Duration:	3-6 months
Side-effects	Sore throat, cough may occur
Instructions:	- Store in cool place - Puff on mouth piece to draw nicotine into the mouth - Do not inhale - Can be used intermittently - Avoid acidic foods and beverages while using



Nasal Spray - Dosing Guideline

Nasal Spray (Nicotrol NS)	
10mg/ml	
Dose:	1-2 doses per hr, max 5 doses/hr or 40 doses/day
Duration:	8 weeks then stop or taper dose for 4-6 weeks
AEs:	Nasal irritation may occur- may resolve with continued use
Instructions:	- Dose = 2 sprays in nostril, alternate nostrils - Most rapid delivery of nicotine - Don't inhale



Bupropion

- Brand names:
 - Wellbutrin SR (BID)
 - Wellbutrin XL (QD)
 - Zyban
 - Buproban



Bupropion Continued

Mechanism of Action:

- Weak inhibitor of neuronal uptake of norepinephrine, dopamine, and serotonin
- Nicotine antagonist for the first 1-2 weeks (reducing reinforcing effects of nicotine) – after which there is an adaption that is not clear.

Bupropion SR: Dosing Guideline

- 150 mg tablets
- Dose: 1 tablet/day x 3 days then twice a day.
- Duration: 12 weeks. If quit, consider additional 12 weeks for relapse prevention

Bupropion SR: Dosing Guideline Continued

- Side-effects: insomnia, dry mouth
- Instructions: may use Bupropion XL

Bupropion Precautions

- History of seizure
- Use of medications that raise seizure risk
- History of anorexia or bulimia
- MAO inhibitor use within 14 days

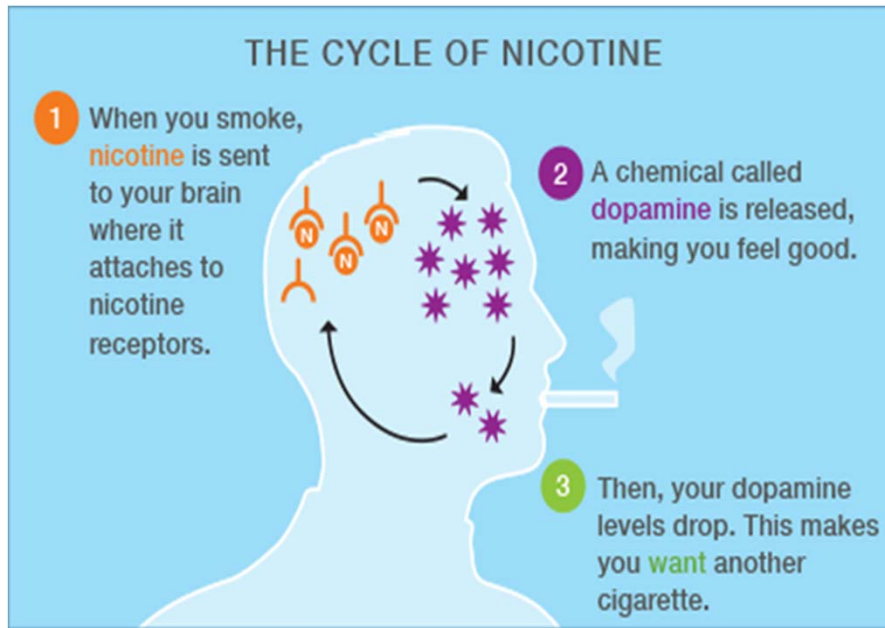
Bupropion Precautions Continued

- Excessive or binge drinking
- Previous allergic reaction to bupropion
- History of anxiety, insomnia or liver disease

Varenicline



Varenicline (Chantix): Mechanism of Action



<http://www.chantix.com/how-chantix-works>

Varenicline: Dosing Guideline

- 0.5 mg, 1 mg tablets
- Dose: 0.5 mg/day (days 1-3), 0.5 mg twice a day (days 4-7) 1 mg twice a day (days 8+)
- Duration: 12 weeks. If quit, consider 12 additional weeks on the medication for relapse prevention.

Side Effects of Varenicline

- Most common: nausea
- Others: abnormal dreams, headaches, constipation, insomnia, vomiting and flatulence

Side Effects of Varenicline Continued

- Some side-effects may improve with dose reduction
- Worsening depression or suicidal thoughts would need to stop medication

Varenicline: Precaution

- Monitor for behavior changes, depressed mood, motor coordination, agitation, suicidal ideation.

Varenicline: Precaution Continued

- Patient with serious psychiatric illness such as schizophrenia, bipolar disorder and major depression, no evidence of worsening of their pre-existing psychiatric condition if stable.
- Use lower dosage if kidney function is severely impaired (i.e. creatinine clearance < 50).