Nicotine Replacement Therapy

Some Cautions with Nicotine Replacement Therapy

1. Signs of Overdose:
   - Nausea, Vomiting, Abdominal pain, diarrhea, cold sweats, headaches, dizziness, confusion, disturbed hearing, palpitations, and difficulty breathing.

2. Other reactions:
   - Atrial fibrillation, ventricular arrhythmia, myocardial infarction, vasculitis, insomnia, sinusitis, nervousness, dizziness, sweating, dry mouth, tachycardia, chest pain, arthralgia, constipation.

3. Contraindication in individuals who have:
   - Hypersensitive to drug or class
   - Nonsmokers
   - Recent acute MI (myocardial infarction)
   - Severe Arrhythmias
   - Unstable Angina
   - Coronary Artery Disease, use with caution
   - Peptic ulcer disease, use with caution
   - Pregnant, use with caution

Advantages to each NRT usage

Patches:
- Once a day application
- Low maintenance
- Use when prefer not to take oral medication.
- Flexibility of 16-24 hr use

Gum and Lozenges:
- Oral gratification
- Convenience - use anytime, anywhere
- Control over how much you use and when
- Practically unnoticeable

Inhalers and Nasal spray:
- Easy to use
- Immediate relief of cravings

Nicotine Replacement Therapy

<table>
<thead>
<tr>
<th>Type of Nicotine Replacement Therapy (NRT)</th>
<th>Dose</th>
<th>Onset of Action</th>
<th>Proper use of NRT</th>
<th>Side Effects</th>
</tr>
</thead>
</table>
| Patches
  - Steady state dosing lasting
    16hrs | 7mg/d, 14mg/d,
         21mg/d
         Or
         5mg/d, 10mg/d,
         15mg/d | Approx 2 hrs to reach therapeutic level | Apply in the morning to non-hairy skin on the upper body above waist or outer arm. | Skin irritation, headache
| | | | | May become jittery sleep disturbance.
| | | | | "Dull" pain if applied on "bony" area |
| Gum
  - Absorbed through mucosal membranes.
  - Each piece is good for 20-30 min | 2mg, 4mg
    - < 24 cigarettes use 2mg,
    - > 24 cigarettes use 4 mg. | Nicotine reaches brain in 5-10 minutes | Chew gum until "peppery" taste; "park" it between your cheek and gum for absorption until peppery taste is gone. Use on a regular schedule to prevent cravings. | Swallowing gum may lead to GI problems
| | | | | Acid beverages like coffee, tea, and fruit juice can interfere with nicotine absorption.
| | | | | Difficult with dental work & gum chewers |
| Inhalers
  - Half-life of 1-2 hrs.
  - Absorbed through mucosal membrane. | 16mg/cartridge
  - Can use 6-16 cartridges a day | 15-20 minutes
  (80 puffs) | Min. use of 6 cartridges/day | User "sucks" on mouth piece |
| | | | | Inhaler effectiveness declines at temps below 50 degrees Fahrenheit.
| | | | | Avoid acid beverages |
| Nasal spray
  - Half-life of 1-2 hrs.
  - Absorbed through nasal mucosa | 10mg/ml
  - Do not use more than 6x and hour or 40x in 24 hrs. | 4-15 minutes | 1 spray to each nostril after exhaling. Should not be inhaled but absorb in nasal mucosa. | Can cause runny nose, sneezing and cough. |
| Lozenges
  - Absorbed through the mucosal membranes.
  - Suck on the lozenge until it dissolves. | 2-4mg | /thought to be similar to Gum (5-10 minutes). No comparison study yet | Do not eat or drink for 15 min. before using the lozenge. Do not bite or chew it like hard candy Do not swallow it. | GI upset of nausea, heartburn, flatulence
| | | | | Insomnia
| | | | | Hiccups, coughing
| | | | | Headache |