

COMPARATIVE INFORMATION ON NICOTINE REPLACEMENT THERAPY PRODUCTS

Adolescents aged 12-18 years old

The guidance of the *Committee on Safety of Medicines Working Group on Nicotine Replacement Therapy* is that the lower age limit for NRT should be lowered to include adolescents aged 12-18-year olds but that as the data in this group were limited if treatment were required for longer than 12 weeks this should be discussed with a healthcare professional (e.g. a doctor, pharmacist or nurse). As a result the information below applies to this age group as well as to adults.

Patches

- Slow controlled release of nicotine over 16 hours or 24 hours. Both types of patch release nicotine at the same rate.
- Nicotine is absorbed through the skin.
- Initial slow absorption over 1-2 hours reaching max concentration several hours later
- Patches are applied to clean, dry, hairless area of the skin, and consecutive patches should not be applied to the same site..
- 16 hour patches are removed overnight.
- All products come in 3 strengths to allow gradual step down.
- Not suitable for:
 - Patients who have strong cravings – highly nicotine dependent
 - Patients with an irregular smoking pattern
 - Patients with high behavioural dependence
 - Patients with extensive skin disease (can be used with caution)

16 hour Patch (Nicorette®)

- Contain 15mg, 10mg and 5mg nicotine
- Recommended step down is 15mg for 8 weeks, 10mg for 2 weeks then 5mg for 2 weeks
- Smokers of less than 10 day may start with 10mg for 8 weeks
- Not suitable for smokers who smoke first cigarette within 30 minutes of waking.

24 hour Patch (Nicotinell® and NiQuitin CQ®)

- Contain 21mg, 14mg and 7mg of nicotine
- Nicotinell® – step down recommended is 3-4 weeks on each strength. Smokers of less than 20/day may start on medium strength.
- NiQuitin CQ® – step down recommended is 21mg for 6 weeks, 14mg for 2 weeks and 7mg for 2 weeks. Smokers of less than 10/day may start on 14mg for 6 weeks.
- May cause sleep disturbance. More risk of skin irritation.

Gum (Nicorette®, Nicotinell® and NiQuitin CQ®)

- Two strengths 2mg and 4mg. 4mg strength recommended for high dependency
- Nicotine is absorbed through the buccal mucosa reaching a peak in 20-30 minutes
- A chew, park, chew technique is used using each piece for 30 minutes
- Recommended use is 8-12 pieces daily for 3 months then decrease gradually
- Useful in irregular smokers, highly nicotine dependent smokers
- Behavioural component may be beneficial for some
- Poor chewing technique can reduce absorption and cause GI upset

2006: Version - Final 14

- Acid drinks eg coffee, soft drinks, decrease absorption
- Alkaline toothpaste (sodium bicarbonate toothpaste) increases nicotine absorption

Lozenges

- Absorbed through buccal mucosa
- Contain aspartame and should be avoided in patients with phenylketonuria
- No eating or drinking while lozenge in mouth
- Use when there is a craving

Niquitin CQ lozenges

- Available in 2mg or 4mg strength. 4mg strength recommended if client smokes first cigarette within 30 minutes of wakening. Clients smoking first cigarette more than 30 minutes after wakening should use the 2mg strength.
- Allow lozenge to dissolve in the mouth over 20-30 minutes. Should be periodically moved from one side of the mouth to the other.
- Step down recommended is 1 lozenge every 1-2 hours for 6 weeks (9-15 lozenges/day), reduced to 1 lozenge every 2-4 hours for 3 weeks, and then to 1 lozenge every 4-8 hour for 3 weeks. To help stay smoke free use one to two lozenges per day only on occasions when strongly tempted to smoke.
- Contain 15mg of sodium/4mg lozenge therefore care in patients on low sodium diets

Nicotinelle lozenges

- Available in 1mg or 2mg strength. 2 mg strength recommended if client smokes more than 30 cigarettes a day. 1 mg strength for clients smoking 30 or less cigarettes a day.
- Lozenge should be sucked until taste becomes strong; then lodged between the gum and the cheek; and when taste fades sucking should commence again.
- Step down recommended is 1 lozenge every 1-2 hours ((8-12 lozenges per day, maximum 15 x 2mg). Withdraw gradually after three months; stop when reached 1-2 lozenges per day.

Sublingual tablet (Nicorette® Microtab)

- Available in 2mg tablet.
- Dissolve under the tongue. Some local irritation occurs but this decreases with time. Do not chew or swallow as poor technique affects absorption, can cause irritation and gastric upset.
- One tablet per hour (usually 8-12/day) if smoke 20 cigarettes or less, and consider up to two tablets per hour for heavier smokers (16-24/day). Continue for at least three months then reduce gradually. Stop when reach 1-2 tablets per day.

Inhalator (Nicorette®)

- Nicotine 10mg cartridges are used in a mouthpiece. Each cartridge lasts for 20 minutes and is not designed to be used all at once.
- Nicotine is absorbed through the buccal mucosa therefore similar to gum
- Used when there is a craving
- Recommended to use 6-12 cartridges/day for up to 8 weeks, decrease by half over next 2 weeks, then reduce to zero at end of further two weeks.
- Useful in highly behaviour dependent patients smoking less than 20/day.

Nasal spray (Nicorette®)

- Each spray provides 0.5mg of nicotine. One spray into each nostril when there is a craving up to maximum of twice an hour. Over 24 hour period maximum is 64 sprays which is equivalent to 2 sprays per nostril per hour for 16 hours. This dose used for 8 weeks then dose is gradually reduced: by half over the next two weeks, and to zero by the end of the following two weeks..
- Each canister contains 200 sprays/doses
- Nicotine is absorbed rapidly through the nasal mucosa reaching maximum concentration within 10 minutes. Most closely mimics smoking.
- Useful in highly nicotine dependent patients with strong craving or requiring rapid relief from cravings.
- Some local irritation occurs but this decreases with time.

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