

# Nicotine Replacement Therapy for Palliation of Nicotine Abstinence Syndrome- Is It Worth?

Sir,

The American Heart Association believes that nicotine transdermal patches and other nicotine substitution drug products, such as nicotine gum, can help smokers quit when used as part of a comprehensive smoking cessation program. Nicotine replacement therapy (NRT) has been shown to be safe and effective in helping people stop using cigarettes when used as part of a comprehensive smoking cessation program. It can be considered as a palliative therapy in nicotine abstinence syndrome in terminal patients (e.g., cancer or COPD patients). The major side effects usually reported with nicotine gum include hiccoughs, gastrointestinal disturbances, jaw pain, and orodental problems.<sup>[1-3]</sup> The only side effect that appears to interfere with use of the patch is the skin sensitivity and irritation; this may affect up to 54% of patch users, but it is usually mild and rarely leads to withdrawal of patch use (Fiore 1992). With the nasal spray, nasal irritation and runny nose are the most commonly reported side effects. Nicotine sublingual tablets have been reported to cause hiccoughs, burning and smarting sensation in the mouth, sore throat, coughing, dry lips and mouth ulcers.<sup>[4]</sup> Combination of NRT products plays a better role in the therapy. The evidence suggests that using a combination of NRT products is better than one product alone. The trials showed fairly consistent effects, with a range of different comparators. The combined therapies included all of the patch and an acute dosing type. The 2000 US clinical practice guidelines<sup>[5]</sup> recommended the use of nicotine patch with another form of NRT as a second line therapy for patients unable to quit on a single type of NRT. It is not entirely clear whether the benefit of combination therapy is due to the sensory effects provided by multiple types of delivery systems, to the higher percentage of nicotine substitution achieved, the better relief of craving by ad lib use of acute dosing forms or some combination of these and other factors.<sup>[6]</sup> Some conditions may keep you from using nicotine gum, including:

- Temporomandibular joint disease (TMJ). TMJ is a disease which involves the joint that connects the lower jaw to the skull
- Pregnancy or breastfeeding
- Recent heart attack
- Irregular heart beat

- Severe or worsening heart pain (angina)
- Allergies to nicotine
- Esophageal reflux
- Active stomach ulcers
- Very high blood pressure.

The information given above might help in the correct selection and execution of NRT, which is becoming a treatment of choice all around the globe. More research and studies are required to elucidate its worth in palliation of nicotine abstinence syndrome.

**Preetinder Singh**

Department of Periodontology and Oral Implantology,  
Swami Devi Dyal Hospital and Dental College, Barwala,  
Haryana, India

*Address for correspondence:*

*Dr. Preetinder Singh,*

*E-mail: preetinder.perio@yahoo.com*

### REFERENCES

1. Aslani A, Rafiei S. Design, formulation and evaluation of nicotine chewing gum. *Adv Biomed Res* 2012;1:57.
2. Fiore MC, Kenford SL, Jorenby DE, Wetter DW, Smith SS, Baker TB. Two studies of the clinical effectiveness of the nicotine patch with different counseling treatments. *Chest* 1994;105:524-33.
3. Palmer KJ, Buckley MM, Faulds D. Transdermal Nicotine. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy as an aid to smoking cessation. *Drugs* 1992;44:498-529.
4. Wallström M, Nilsson F, Hirsch JM. A randomized, double-blind, placebo-controlled clinical evaluation of a nicotine sublingual tablet in smoking cessation. *Addiction* 2000;95:1161-71.
5. Fiore MC, Jaén CR, Baker TB, Bailey WC, Benowitz NL, Curry SJ, *et al*. Treating Tobacco Use and Dependence. A Clinical Practice Guideline. Rockville, MD: US Department of Health and Human Services; 2000. Agency for Healthcare Research and Quality Publication No. 00-0032.
6. Sweeney CT, Fant RV, Fagerstrom KO, McGovern JF, Henningfield JE. Combination nicotine replacement therapy for smoking cessation: Rationale, efficacy and tolerability. *CNS Drugs* 2001;15:453-67.

#### Access this article online

##### Quick Response Code:



**Website:**  
www.jpalliativecare.com

**DOI:**  
10.4103/0973-1075.132655