

# Smoking cessation

Kirandeep Kaur  
Shivani Juneja  
Sandeep Kaushal

Department of Pharmacology,  
Dayanand Medical College and  
Hospital, Ludhiana, Punjab, India

**Keywords:** nicotine replacement therapy, smoking, pregnancy

With reference to the article published under the title “Pharmacologic agents for smoking cessation: A clinical review”,<sup>1</sup> we would like to add some information related to smoking cessation therapy among pregnant females. In that article, in the nicotine replacement therapy section, pregnancy has been considered as a contraindication to the use of transdermal patches, gum, lozenges, nasal sprays, and oral inhalers containing nicotine.

It is well-established that maternal smoking during pregnancy causes significant fetal morbidity but the role of nicotine replacement therapy (NRT) has not been clear until now. The greatest risk to an unborn baby’s health from smoking is posed by carbon monoxide, which can cause fetal hypoxia. Therefore, although using nicotine replacement therapy is not ideal for the baby, the risks of nicotine replacement therapy far outweigh the risks of continuing to smoke.<sup>2</sup>

Although there is no comparison of the benefits and risks associated with smoking or nicotine replacement therapy in patients, pregnancy is not a contraindication to its use in women. The US Food and Drug Administration has mentioned that nicotine can be given to pregnant women after consultation with a physician.<sup>3</sup> The US guidelines mention the use of medication among pregnant smokers under the heading of effectiveness and safety. With regard to effectiveness, the US guidelines state that “based on the data, the panel did not make a recommendation regarding medication use during pregnancy”. With regard to safety, the guidelines mention that safety is not categorical. A designation of “safe” reflects a conclusion that the benefits of a drug outweigh its risks. Nicotine most likely does have adverse effects on the fetus during pregnancy. Although the use of nicotine replacement therapy exposes pregnant women to nicotine, smoking exposes them to nicotine plus numerous other chemicals that are injurious to the woman and fetus. These concerns must be considered in the context of inconclusive evidence that cessation medications boost abstinence rates in pregnant smokers.<sup>4</sup>

Even the American College of Obstetricians and Gynecologists mentions that “use of nicotine replacement therapy should be undertaken with close supervision and after careful consideration and discussion with the patient of the known risks of continued smoking and the possible risks of nicotine replacement therapy. If nicotine replacement is used, it should be with the clear resolve of the patient to quit smoking.”<sup>5</sup> The US guidelines have been available since 2010. This letter aims to give the current status of nicotine replacement therapy in pregnant patients who wish to quit smoking.

Correspondence: Kirandeep Kaur  
Department of Pharmacology, Dayanand  
Medical College and Hospital, Ludhiana,  
141001 Punjab, India  
Tel +91 9815277755; +91 1614686614  
Email kiransondhi@gmail.com

## References

1. Patel DR, Feucht C, Reid L, Patel ND. Pharmacologic agents for smoking cessation: A clinical review. *Clin Pharmacol*. 2010;2:17–29.
2. Kaur K, Kaushal S. Pharmacotherapy of smoking cessation—current and future prospects. In: Berhardt LV, editor. *Advances in Medicine and Biology Volume 12*. Hauppauge, NY: Nova Publisher; 2011:1–31.
3. US Food and Drug Administration. Smoking cessation products. Available at: <http://www.fda.gov/forconsumers/consumerupdates/ucm198176.htm>. Accessed January 28, 2012.
4. Fiore MC, Jaen CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline. Rockville (MD): US Department of Health and Human Services, Public Health Service; 2008. Available at: [http://www.surgeongeneral.gov/tobacco/treating\\_tobacco\\_use08.pdf](http://www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf). Accessed January 24, 2012.
5. The American College of Obstetricians and Gynecologists. Smoking cessation during pregnancy. Available at: <http://www.acog.org/~media/Committee%20Opinions/Committee%20on%20Health%20Care%20for%20Underserved%20Women/co471.ashx?dmc=1&ts=20120124T0345187164>. Accessed January 24, 2012.

### Clinical Pharmacology: Advances and Applications

Dovepress

### Publish your work in this journal

Clinical Pharmacology: Advances and Applications is an international, peer-reviewed, open access journal publishing original research, reports, reviews and commentaries on all areas of drug experience in humans. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use.

Submit your manuscript here: <http://www.dovepress.com/clinical-pharmacology-advances-and-applications-journal>

Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.