

REFERENCES

- Stumvoll M, Nurjhan N, Perriello G, Dailey G, Gerich JE. Metabolic effects of metformin in non-insulin-dependent diabetes mellitus. *N Engl J Med* 1995;333:550-4.
- UK Prospective Diabetes Study (UKPDS) Group. Effect of intensive blood-glucose control with metformin on complications in overweight patients with type 2 diabetes (UKPDS 34). *Lancet* 1998;352:854-65.
- Roumie CL, Hung AM, Greevy RA, Grijalva CG, Liu X, Murff HJ, et al. Comparative effectiveness of sulphonylurea and metformin monotherapy on cardiovascular events in type 2 diabetes mellitus. *Ann Intern Med* 2012;157:601-10.
- Seidowsky A, Nseir S, Houdret N, Fourrier F. Metformin-associated lactic acidosis: a prognostic and therapeutic study. *Crit Care Med* 2009;37:2191-6.
- Eurich DT, McAlister FA, Blackburn DF, Majumdar SR, Tsuyuki RT, Varney J, et al. Benefits and harms of antidiabetic agents in patients with diabetes and heart failure: systematic review. *BMJ* 2007;335:497.
- Hague WM. Metformin in pregnancy and lactation. *Aust Prescr* 2007;30:68-9.
- Gilbert C, Valois M, Koren G. Pregnancy outcome after first-trimester exposure to metformin: a meta-analysis. *Fertil Steril* 2006;86:658-63.
- Rowan JA, Hague WM, Gao W, Battin MR, Moore MP; MiG Trial Investigators. Metformin versus insulin for the treatment of gestational diabetes. *N Engl J Med* 2008;358:2003-15.
- Gardiner SJ, Kirkpatrick CM, Begg EJ, Zhang M, Moore MP, Saville DJ. Transfer of metformin into human milk. *Clin Pharmacol Ther* 2003;73:71-7.
- Blonde L, Dailey GE, Jabbour SA, Reasner CA, Mills DJ. Gastrointestinal tolerability of extended-release metformin compared to immediate-release metformin tablets: results of a retrospective cohort study. *Curr Med Res Opin* 2004;20:565-72.
- de Jager J, Kooy A, Leher P, Wulffele MG, van der Kolk J, Bets D, et al. Long term treatment with metformin in patients with type 2 diabetes and risk of vitamin B-12 deficiency: randomised placebo controlled trial. *BMJ* 2010;340:c2181.
- Shenfield G. Metformin: myths, misunderstandings and lessons from history. *Aust Prescr* 2013;36:38-9.
- Marchetti P, Benzi L, Cechetti P, Giannarelli R, Boni C, Ciociaro D, et al. Plasma biguanide levels are correlated with metabolic effects in diabetic patients. *Clin Pharmacol Ther* 1987;41:450-4.
- Salpeter S, Greyber E, Pasternak G, Salpeter E. Risk of fatal and non-fatal lactic acidosis with metformin use in type 2 diabetes mellitus. *Cochrane Database Syst Rev* 2010;CD002967.
- Thomson KR, Varma DK. Safe use of radiographic contrast media. *Aust Prescr* 2010;33:19-22.
- Goergen SK, Rumbold G, Compton G, Harris C. Systematic review of current guidelines, and their evidence base, on risk of lactic acidosis after administration of contrast medium for patients receiving metformin. *Radiology* 2010;254:261-9.
- Royal Australian and New Zealand College of Radiologists. RANZCR guidelines for iodinated contrast administration. 2009. www.ranzcr.edu.au/quality-a-safety/resources/guidelines [cited 2014 Jan 7]
- Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin JM, Walker EA, et al; Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med* 2002;346:393-403.

FURTHER READING

Nestler JE. Metformin for the treatment of the polycystic ovary syndrome. *N Engl J Med* 2008;358:47-54.

Lipska KA, Bailey CJ, Inzucchi SE. Use of metformin in the setting of mild-to-moderate renal insufficiency. *Diabetes Care* 2011;34:1431-7.

Letters to the Editor

Rational use of topical corticosteroids

Editor, – In the article on topical corticosteroids (*Aust Prescr* 2013;36:158-61) there is no reference to the oral mucosa. Some steroid preparations have long been used as effective treatment for conditions in the mouth, notably for lichen planus.¹ One option is 0.05% betamethasone ointment. This has proved particularly relevant in over 20 years of practice, as I am contacted periodically by pharmacists questioning if such a prescription is appropriate for use on the oral mucosa.

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REFERENCE

- Sugarman PB, Savage NW. Oral lichen planus: causes, diagnosis, and management. *Aust Dent J* 2002;47:290-7.

Pablo Fernández-Peña, one of the authors of the article, comments:

 Some mucosas have stratified epithelium similar to the skin, but with thinner or non-existent stratum corneum. This changes the absorption of molecules. In a cream or ointment there are more components than the corticosteroid, and I do not have enough information to assess that it is safe to use skin products in the oral mucosa.

The clinical outcome will depend on making a correct diagnosis and applying the right molecule in the most appropriate vehicle for the correct duration. In this regard, there may be vehicles that are not adequate for the oral mucosa. Most dermatologists tend to compound their topical corticosteroids in 'orabase' for use on mucosas, to be on the safe side.



The Editorial Executive Committee welcomes letters, which should be less than 250 words. Before a decision to publish is made, letters which refer to a published article may be sent to the author for a response. Any letter may be sent to an expert for comment. Letters are usually published together with their responses or comments in the same issue. The Committee screens out discourteous, inaccurate or libellous statements and sub-edits letters before publication. Authors are required to declare any conflicts of interest. The Committee's decision on publication is final.

LETTERS

Asthma drugs in pregnancy and lactation

Editor, – The article 'Asthma drugs in pregnancy and lactation' (Aust Prescr 2013;36:150-3) was informative and well written, but there was one omission. While there is a role for 'doctors, pharmacists, asthma educators and midwives in encouraging adherence to treatment', equally important is the role of the registered nurse providing education and support in treatment management. In particular, the registered nurse endorsed as a nurse practitioner may act in this capacity.

Depending on their scope of practice, nurse practitioners may be primary care providers, actively involved and independently responsible for prescribing and management of medication regimens for pregnant women with asthma. Primary care has been identified as a key growth area for nurse practitioners working to improve access to care and improve effectiveness and efficiency of the healthcare system.^{1,2} As of June 2013, there were 926 endorsed nurse practitioners registered with the Nursing and Midwifery Board of Australia.³

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REFERENCES

1. King J, Carter A, Brewerton R, Watts I. Nurse practitioners in primary care: benefits for your practice. Australian College of Nurse Practitioners. 2012. www.amlalliance.com.au/_data/assets/pdf_file/0016/45025/20120829_rsc_NP-Bus-case-web-version.pdf [cited 2014 Jan 7]
2. Nursing and Midwifery Board of Australia. Nurse practitioner standards for practice. 2013. www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Codes-Guidelines/nurse-practitioner-standards-of-practice.aspx [cited 2014 Jan 7]
3. Australian Nursing and Midwifery Council. Nurse and Midwife Registrant Data. 2013. www.nursingmidwiferyboard.gov.au [cited 2014 Jan 7]

Angelina Lim, Safeera Hussainy and Michael Abramson, the authors of the article, comment:

We agree and advocate that nurse practitioners have a vital role in counselling and improving adherence and ongoing asthma monitoring during pregnancy. It is important that the allied health community work together to provide multidisciplinary care for our patients. We are preparing to report a study that showed an intervention including multidisciplinary care, education and regular monitoring can help improve asthma control in pregnant women. (The protocol is available at www.biomedcentral.com/1471-2458/12/1094.) The study was in an antenatal setting and mainly involved midwives, however we recently conducted a survey which found many GPs are working with nurse practitioners to help provide better asthma management. After disseminating our results from this trial, we hope to encourage regular monitoring of maternal asthma in the community and make good use of nurse practitioners too.