

Further reading

Joint HGSA/RANZCOG recommended 'Best practice' guidelines on antenatal screening for Down's syndrome and other fetal aneuploidy. 2004.

<http://www.ranzcog.edu.au/publications/collegestatements> [cited 2006 Mar 8]

Conflict of interest: none declared

Self-test questions

The following statements are either true or false (answers on page 55)

7. Alpha fetoprotein is not found in maternal serum during the first trimester of a normal pregnancy.
8. Fetal growth retardation is best assessed by serial measurements of serum oestriol.

Dental notes

Prepared by Dr M. McCullough of the Australian Dental Association

Managing hepatitis C in the community (p.36)

The number of Australian adults living with hepatitis C is increasing and is not confined to any one section of the population. Dentists need to be aware that hepatitis C may be present in the saliva of infected patients. Our infection control practices therefore need to be exemplary to avoid spread of

this, and other blood-borne viruses. Dentists are in a position to support medical advice that infected patients undergo antiviral treatment where appropriate and address secondary factors associated with liver disease in these patients.

Any dentists who carry a blood-borne virus have a professional and ethical responsibility to review the way they practise so as to ensure that they minimise the likelihood of infecting their patients. The Australian Dental Association offers advice and co-operation that should be sought.

Your questions to the PBAC

Adrenaline: shelf-life

I was very interested in 'Your questions to the PBAC: Adrenaline' (Aust Prescr 2005;28:90). In particular I wish to comment about the short expiry date of EpiPens.

About six or seven years ago I contacted the distributor of the EpiPen in Australia. I complained that sometimes I would purchase an EpiPen for my son and often it only had seven or eight months left before it expired.

Their explanation was that it was actually transported from the USA and by the time it arrived here many months of its 12-month shelf-life were gone.

On hearing this I checked out an old Martindale (26th edition) and I read that adrenaline in solution was very stable for a number of years. I wrote to the manufacturer of EpiPens in the USA with a photocopy of the extract out of Martindale but never received a reply.

Being a sceptic I just wonder whether it suits the manufacturer to overlook these details as obviously it would affect their sales substantially. Also I think it would be unlikely that a company would actively pursue ways of extending the expiry date!

At the time I was thinking about having the adrenaline stability checked out in an expired EpiPen, but did not have time to pursue this further.

Perhaps if the Pharmaceutical Benefits Advisory Committee (PBAC) did it on a more authoritative basis one might receive a reply.

Kevin Dallimore
Dermatologist
Perth

PBAC response:

The PBAC is aware of the short expiry date of EpiPen. However, the sponsor, CSL Limited, has advised recently that the most recent data from the manufacturer's stability program do not support an extension of shelf-life.

CSL Limited is currently implementing a number of changes to the distribution process. These aim to improve the shelf-life in Australia of EpiPen which is produced with a 20-month shelf-life by the US supplier, Dey Laboratories. The company advises that the following changes have been introduced to minimise the time lost between manufacture and patient in the distribution chain:

- EpiPen will now be produced with Australian packaging by Dey Laboratories to save on repacking time in Australia
- CSL will work with wholesalers and pharmacies to minimise the time stock spends on shelves

- CSL will not release EpiPen with a shelf-life of less than 13 months and in most cases it will be considerably more. Stock released since September 2005 will not expire for 17 months.

Letters explaining these changes were sent by CSL to doctors (general practitioners, immunologists, allergists, paediatricians and respiratory physicians), pharmacies and wholesalers.

New drugs

Some of the views expressed in the following notes on newly approved products should be regarded as tentative, as there may have been little experience in Australia of their safety or efficacy. However, the Editorial Executive Committee believes that comments made in good faith at an early stage may still be of value. As a result of fuller experience, initial comments may need to be modified. The Committee is prepared to do this. Before new drugs are prescribed, the Committee believes it is important that full information is obtained either from the manufacturer's approved product information, a drug information centre or some other appropriate source.

Anecortave acetate

Retaane (Alcon)

vials containing 15 mg/0.5 mL suspension

Approved indication: macular degeneration

Australian Medicines Handbook section 11.7

Most people with age-related macular degeneration have the non-exudative (dry) form. The exudative (wet) form is less common, but is more likely to cause blindness. Blood vessels grow through defects in the basement membrane of the retina then leak. This leakage causes loss of vision and scarring. The vessels can be treated with photocoagulation or, in patients with classical subfoveal choroidal neovascularisation, photodynamic therapy with verteporfin.

As the exudative form involves neovascularisation, it is possible which inhibiting angiogenesis will stop the disease progressing. Anecortave acetate is a molecule, structurally related to cortisol, which inhibits the proteases needed for blood vessel growth. Injecting the depot formulation through a cannula into the posterior juxtасcleral area can stabilise the condition for several months. If indicated, the injection can be repeated six months later.

A clinical trial randomised 128 patients to receive anecortave (3 mg, 15 mg or 30 mg) or a placebo. Most of these patients with wet age-related macular degeneration had predominantly classic lesions. After six months there was a significant difference in the size of the lesions in patients given 15 mg anecortave. Although this difference was not statistically significant after 12 months, there was a significant difference in visual acuity. Patients given 15 mg anecortave were more likely to have stable vision and less likely to have severe loss of vision than patients given placebo. Efficacy seems greater in the patients with predominantly classic lesions.¹ The advantage of anecortave over placebo remained for those patients still in the study after 24 months.²

During the study approximately 41% of patients dropped out, mainly because of disease progression.¹ Adverse events reported during clinical trials include eye pain, hyperaemia, cataract, reduced intraocular pressure and ptosis.

The product information contains summary data from phase II trials comparing anecortave with verteporfin and photodynamic therapy. One trial gave patients anecortave or placebo 5–8 days after photodynamic therapy with verteporfin. Anecortave did not have a statistically significant advantage over placebo. The other trial has now been published. It randomised 263 patients with predominantly classic lesions to receive anecortave and 267 to receive photodynamic therapy with verteporfin. After 12 months, 45% of the anecortave group and 49% of the photodynamic therapy group had lost less than three lines of vision on the trial's visual acuity chart. Although the trial was designed to show that anecortave was not inferior, non-inferiority could not be confirmed.³

T T manufacturer provided some data

References

1. The Anecortave Acetate Clinical Study Group. Anecortave acetate as monotherapy for treatment of subfoveal neovascularization in age-related macular degeneration. *Ophthalmology* 2003;110:2372-85.
2. Schmidt-Erfurth U, Michels S, Michels R, Aue A. Anecortave acetate for the treatment of subfoveal choroidal neovascularization secondary to age-related macular degeneration. *Eur J Ophthalmol* 2005;15:482-5.
3. Slakter JS, Bochov T, D'Amico DJ, Marks B, Jerdan J, Sullivan EK. Anecortave acetate (15 milligrams) versus photodynamic therapy for treatment of subfoveal neovascularization in age-related macular degeneration. *Ophthalmology* 2006;113:3-13.

Erlotinib

Tarceva (Roche)

25 mg, 100 mg and 150 mg tablets

Approved indication: non-small cell lung cancer

Australian Medicines Handbook section 14.3.9

In some cancers there is overexpression of epidermal growth factor receptors. These receptors are linked to tyrosine kinase and increased tyrosine kinase activity is associated with angiogenesis and tumour progression. This enzyme is therefore a target for drug therapy (see 'Angiogenesis inhibitors in cancer' *Aust Prescr* 2006;29:9–15).