### **Dental notes**

# Managing acute pain in patients with an opioid abuse or dependence disorder

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The use of illicit drugs, in particular heroin, can have profound effects on the dentition, causing rampant caries, advanced periodontal disease and exacerbation of mucosal diseases. In surveys of injecting drug users, up to 70%, reporting concern about the state of their mouths, described problems such as 'teeth snapping off', 'teeth falling apart', gum disease and trauma. Methadone and methamphetamines are perceived by some injecting drug users to 'eat away their teeth'.<sup>1</sup>This may be partly related to the effect these drugs have on salivary flow, dietary changes and the concomitant long-term lack of oral hygiene.

Dentists can therefore be confronted with patients presenting with acute dental pain who are either currently dependent or are recovering from their dependency. It is essential that our attitudes, and those of our staff, do not become barriers to Effective management of these patients' pain. Self-reporting of the degree of dental pain must be accepted on face value, as the experience of pain is totally subjective in nature and these patients' pain thresholds may have been significantly affected by long-term drug use. This can result in diagnostic dilemmas with the reported pain appearing out of proportion to the clinical signs.

Most dental pain can be treated clinically with effective local anaesthesia, interventional dental treatment and in the immediate post-treatment phase, by maximising the use of non-opioid analgesia such as paracetamol and non-steroidal anti-inflammatory drugs. If a patient has extreme pain which does not respond appropriately to dental treatment and shortterm, non-opioid analgesia, it would be wise to consult with the patient's medical practitioner.

#### Reference

 Reid G, Crofts N, Hocking J. Needs analysis for primary health care among the street drug using community in Footscray. Melbourne: The Centre for Harm Reduction, Macfarlane Burnet Centre for Medical Research; 2000.

### **New drugs**

Some of the views expressed in the following notes on newly approved products should be regarded as tentative, as there may be limited published data and 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.

#### Anti-thymocyte globulin

Thymoglobuline (Genzyme)

vials containing 25 mg freeze-dried powder

Approved indication: renal transplant rejection and aplastic anaemia

Australian Medicines Handbook section 14.5.3

Anti-thymocyte globulin is indicated for the prophylaxis of renal graft rejection as well as the treatment of steroid-resistant renal transplant rejection. Kidney transplantation is the treatment of choice for most patients with end-stage renal disease. However, 15–35% of transplant recipients will experience one episode of acute rejection in the first year. Giving antibody to deplete thymocytes (T cells) is one way to suppress the immune system to prevent or reverse graft rejection.

Anti-thymocyte globulin is a polyclonal antibody against human T cells. It is a gamma immunoglobulin produced by immunising rabbits. As well as depleting T cells in the circulation, anti-thymocyte globulin is also thought to reduce T cell proliferation, homing and cytotoxic effects within the body. Depletion of T cells occurs within a day of starting intravenous treatment.

This immunoglobulin has been compared to other treatments in renal transplant patients who are also receiving other immunosuppressant drugs. In a randomised trial of 72 patients, anti-thymocyte globulin was more effective at preventing acute rejection during the first year after transplantation than a similar polyclonal antibody derived from horses (4% vs 25% patients had acute rejection).<sup>1</sup> Five years after surgery, patient survival was similar for both treatments, but graft survival was significantly better in patients treated with anti-thymocyte globulin (77%) compared to those treated with the horse antibody (54%).<sup>2</sup>

The rabbit polyclonal has also been compared to basiliximab (an antibody directed towards the interleukin-2 receptor) for the prevention of acute rejection in 278 renal transplant patients.