

Parecoxib

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NSAIDs were revolutionary in the treatment of inflammatory arthritis. It soon became clear that drugs like ibuprofen were also useful as analgesics and they became widely used in this way. The next step was the use of intramuscular diclofenac in conditions like renal colic, for which it is very effective. NSAIDs, however, have been associated with gastrointestinal and antiplatelet adverse effects. The development of cyclo-oxygenase (COX)-2-selective inhibitors has resulted in NSAIDs which retain their analgesic efficacy but have a better tolerability profile. Parecoxib, a COX-2 specific inhibitor, is a prodrug of valdecoxib. Intravenous parecoxib is as effective as the NSAID ketorolac or even morphine in the treatment of severe pain (including postoperative pain). It works 12 to 14 minutes after administration and a dose of 40mg provides good or excellent relief of pain in approx-

imately 90% of patients. Parecoxib can also be given by intramuscular injection.

COX-2 inhibitors have been revolutionary in improving the tolerability of NSAIDs. In recent years, there has been increasing awareness of the complications associated with NSAID-induced gastric erosion. These complications are much more common than previously thought. In 1 study, ketorolac caused gastric erosion in significantly more healthy volunteers than parecoxib (23 vs 0%).^[1] Regardless of whether or not there are clinical consequences, maintenance of the gastric mucosa is obviously desirable. Parecoxib is therefore a significant advance in providing a well tolerated and effective intravenous analgesic for moderate or severe pain (including postoperative pain). ▲

Reference

1. Hubbard RC, Kuss ME, LeCompte DL, et al. An endoscopic study of the gastroduodenal effects of SC-69124A, a parenteral COX-2-specific inhibitor, in the elderly [abstract no. 1455]. *Gastroenterology* 2000 Apr; 118 Suppl. 2: 250