SOCRATES 7 (synopsis of Cochrane Reviews applicable to emergency services)

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In this the seventh article of the SOCRATES series we present our synopses of reviews from the Cochrane Database of Systematic Reviews relating to analgesia that the working party felt were of particular relevance to Emergency Medicine practitioners. The methods of our review and the rationale for the forming the SOCRATES working party are as have previously been published.

NON-STEROIDAL ANTI-INFLAMMATORY DRUGS FOR LOW BACK PAIN

Despite low back pain being a common problem and a major cause of employee sickness, the effectiveness of the many available treatment modalities is uncertain. There are a variety of national guidelines available on the management of low back pain that recommend the prescription of NSAIDs as a therapeutic option.

However, there is disagreement as to the exact role they play in relation to other therapies.

Results

Fifty one studies of 5057 patients. 16 studies were RCTs that were classed as high quality.

SOCRATES says

NSAIDs are slightly effective for short-term improvement in patients with acute low back pain. It is unclear whether they are more effective than other analgesics or whether one particular NSAID is better than another.


PHYSICAL MEDICINE MODALITIES FOR MECHANICAL NECK DISORDERS

Neck pain is a common condition; at any given time 9% men and 12% women will have neck problems. Patients receive a variety of therapeutic interventions. This review examines the role of physical medicine modalities including electromagnetic therapy, laser therapy, traction, exercise, heat or cold application, acupuncture, and cervical orthoses.

Results

Thirteen RCTs were identified.

SOCRATES says

There is insufficient evidence to conclude whether any physical modalities are beneficial for patients with neck pain.


ANTICONVULSANT DRUGS FOR ACUTE AND CHRONIC PAIN

Anticonvulsants have been used in pain management since the 1960s. The clinical impression is that they are useful for neuropathic pain. The precise mechanisms of action are uncertain.

Results

Of the two studies identified of acute pain management, one placebo controlled study showed no benefit on acute postoperative pain with sodium valproate. The other compared prednisolone with carbamazepine for acute herpes zoster and reported faster healing and less pain with prednisolone. Twenty one trials were identified reporting the use of anticonvulsants in chronic pain—carbamazepine, gabapentin, and phenytoin were all effective for trigeminal neuralgia and diabetic neuropathy.

SOCRATES says

Anticonvulsants have no role in acute pain management.


BED REST FOR LOW BACK PAIN AND ACUTE SCIatica

Back pain is a common problem and causes significant absenteeism from work.

Advice given to patients varies in the level of activity that is suggested and some clinicians recommend a period of bed rest. Others recommend continued activity.

Results

Nine trials were found that included 1435 patients.

SOCRATES says

There is likely to be little difference in the effect of staying active or taking bed rest for patients with low back pain with or without sciatica.


SINGLE DOSE ORAL ASPIRIN FOR ACUTE PAIN

Aspirin (or willow leaves/bark) has been used for its analgesic properties for many centuries. There is a need for information on the efficacy and safety of all analgesics. There are few trials of direct comparison, so comparisons of different analgesics with placebo have been used in this review to determine the number needed to treat for 50% pain relief. The objective of this review was to quantify the analgesic efficacy and adverse effects of a single dose of aspirin in acute pain and to compare with other analgesics.
Results
72 trials met the inclusion criteria providing data on 6,550 patients. Significant benefit of aspirin over placebo was shown for doses of 600 mg or more with a clear dose response (Numbers needed to treat (NNT) 50% pain relief = 4.4) (600 mg dose). Significant adverse effects of drowsiness and gastric irritation are seen even with a single dose (Numbers needed to harm (NNH) 28 (600 mg dose).

SOCRATES says
Aspirin is an effective analgesic for moderate to severe acute pain, giving similar pain relief milligram for milligram with paracetamol.


CONCLUSION
In this article the SOCRATES working party have summarised the reviews we felt were relevant to Emergency Practitioners in the Cochrane Database of Systematic Reviews relating to analgesia. In the next issue we will present our synopses of reviews relating to cardiology and infection.

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