

GEMS OF NEW ZEALAND

Primary Health Care Research

Which anticonvulsant drug is effective for which types of neuropathic pain?

Anticonvulsant drugs are used for treating neuropathic pain. This paper reviewed all the evidence for the efficacy of different anticonvulsants for specific conditions. It includes a table which summarises which drugs have been assessed for which conditions and whether the evidence supports their use or not. Gaps in the evidence are striking.

Goodyear-Smith F, Halliwell J. Anticonvulsants for neuropathic pain: gaps in the evidence. *Clin J Pain*. 2009;25(6):528–536. DOI: 10.1097/AJP.0b013e318197d4cc.

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Use of antidepressants for depression in primary care

Previous reviews have looked at the use of antidepressant treatment in secondary care settings, but there has been doubt about the effectiveness of antidepressants in primary care. This Cochrane review included 14 studies conducted in adults (not the elderly) in primary care settings, in which tricyclic antidepressants (TCAs) or selective serotonin re-uptake inhibitors (SSRIs) were compared against placebo controls in the treatment of depression. The results showed that both types of antidepressants were effective for depression. There appeared

to be more adverse effects with TCAs than with SSRIs, although the rates of withdrawal from the study medication due to adverse effects were very similar between the two classes of drugs.

Arroll B, Elley CR, Fishman T, Goodyear-Smith FA, Kenealy T, Blashki G, Kerse N, MacGillivray S. Antidepressants versus placebo for depression in primary care (review), *The Cochrane Library*, pp 61, Issue 3, 2009. ID 692702053115360884.

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Stopping smoking early in pregnancy may prevent pre-term births

A cohort study of 2500 women found that current smokers had higher rates of spontaneous pre-term birth and small for gestational age infants than stopped smokers. Women who stopped smoking before 15 weeks' gestation had the same rates of spontaneous preterm birth and small-for-dates babies as non-smokers, indicating that these severe adverse effects of smoking may be reversible if smoking is stopped early in pregnancy.

McCowan L, Dekker G, Chan E, Stewart A, Chappell L, Misty Hunter M, Moss-Morris R, North R On behalf of the SCOPE consortium. Spontaneous preterm birth and small for gestational age infants in women who stop smoking early in pregnancy: prospective cohort study. *BMJ*.

2009;338:b1081. doi:10.1136/bmj.b1081.

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Acclimatisation by aeroplane

It is generally accepted that the performance of athletes participating in aerobic endurance events is adversely affected by altitude, whereas athletes involved in speed and anaerobic events are either unaffected or perform even better at altitude than at sea level. Athletes travelling overseas in long-haul flights are effectively spending up to 13 hours at elevated altitude, because aircraft cabins are pressurised to maximum effective altitudes of 2440 metres. This study showed that oxygen saturation declined significantly in athletes during long-haul commercial flights, in response to reduced cabin pressure. Athletes often need to compete at altitudes similar to the effective altitudes experienced in airliner cabins. The exact timing and impact of these changes on performance is still unclear but has implications for altitude acclimatisation planning by athletes.

Geertsema C, Williams AB, Dzendrowskyj P, Hanna C. Effect of commercial airline travel on oxygen saturation in athletes. *Br J Sports Med*. 2008;42(11):577–81.

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