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METHUSELAH

Financial incentives for smoking cessation in pregnancy

Does the offer of up to £400 of shopping vouchers added to routine UK National Health Service specialist pregnancy stop smoking services help pregnant smokers quit compared with routine support alone? To evaluate this proposition a randomised trial was conducted in the west of Scotland between December 2011 and February 2013.

612 pregnant smokers were randomised. Both trial groups were offered routine care from a specialist stop smoking service. The intervention group received up to £400 in shopping vouchers during their pregnancy. The primary outcome was cotinine verified cessation at 34–38 weeks' gestation towards the end of pregnancy.

The offer of financial incentives, added to specialist pregnancy stop smoking services, more than doubled the quit rate among pregnant smokers, from 9% to 23%. An editorial commentator noted that the trial was well designed. She also noted that barely half of the quitters remained abstinent at 6 months post-partum.

BMJ 2015;350:h134 & h297.

Treatment of hyperkalaemia with sodium zirconium cyclosilicate

Hyperkalaemia (serum potassium level, >5.0 mmol per liter) is a common electrolyte disorder that is associated with serious cardiac dysrhythmias and increased mortality. Treatment with polymer resins (e.g., sodium polystyrene sulfonate) has a poor side-effect profile and uncertain efficacy. This is a report of a study which investigated whether zirconium cyclosilicate (ZS-9), a novel selective cation exchanger, could lower serum potassium levels in patients with hyperkalaemia.

753 hyperkalaemic patients were randomised to receive varying doses of ZS-9 or placebo 3 times daily for 48 hours. Those who were normokalaemic at 48 hours were then randomised to either ZS-9 or placebo once daily on days 3–14.

The conclusions were that patients with hyperkalaemia who received ZS-9, as compared with those who received placebo, had a significant reduction in potassium levels at 48 hours, with normokalaemia maintained during 12 days of maintenance therapy. Adverse effects were similar in ZS-9 and placebo groups. Diarrhoea was the most common complication in both groups.

N Engl J Med 2015;372:222–31.

Do tumour necrosis factor-alpha inhibitors increase the risk for herpes zoster in rheumatoid arthritis patients?

The aim of this study was to determine whether exposure to tumour necrosis factor (TNF)-alpha inhibitors increases the risk of herpes zoster (HZ) among patients with rheumatoid arthritis (RA). People with RA are known to have an increased risk of HZ compared with the general population. This increased risk may in part be due to treatment with steroids and other antirheumatic drugs. Methotrexate has not been incriminated.

This cohort study involved 2157 RA patients of whom 249 (11.5%) had doctor-verified HZ. The researchers report an increased risk of HZ (hazard ratio 1.71) for all TNF-alpha inhibitors except etanercept. They speculate that further research is needed to explore the safety, efficacy and cost-effectiveness of HZ vaccinations in RA patients and in patients commencing TNF-alpha inhibitors.

Internal Medicine Journal 2015;45:310–318.