

A NEW PSA ERA?

US experts say that the prostate-specific antigen (PSA) era as we know it is probably over when it comes to the detection of prostate cancer. Stamey and colleagues reviewed 20 years' worth of data (from 1983 to 2003), finding a declining relationship between serum PSA level and the largest prostate cancers, from 44% in 1983–1988 to 2% in 1999–2003. Higher PSA levels reflect an overall greater prostatic volume rather than the presence of prostate cancer *per se*. Two decades ago, the prostatic tumours diagnosed were generally large, generating PSA levels that were high enough to provide an accurate measure of cancer severity; this is no longer the case today.

However, these experts say PSA testing will become an enduring marker of the degree and rate of progression of benign prostatic hypertrophy. It will also continue to be useful as a marker of failure to cure after therapy for prostate cancer.

J Urol 2004; 172: 1297-1301

ROFECOXIB WITHDRAWAL

Rofecoxib (Vioxx), a selective NSAID, has been voluntarily withdrawn from the market, worldwide, due to concern that long-term use may put patients at increased risk for serious cardiovascular events. According to the US Food and Drug Administration (www.fda.gov), the manufacturer's decision was based on new data from the Adenomatous Polyp Prevention on Vioxx (APPROVe) trial, which had been designed to determine whether 25 mg rofecoxib was effective in preventing the recurrence of colon polyps. APPROVe was stopped two months earlier than planned when, compared with placebo, continuous use of rofecoxib for 18 months or more was associated with an increased risk of serious events such as myocardial infarction and stroke.

www.cmaj.ca/news/30_09_04.shtml

ONCE AND FOR ALL?

A single dose of dexamethasone has a place in the management of mild croup in most, if not all, children, say Canadian researchers. In their multicentre, double-blind, randomised controlled trial involving 720 children with mild croup, they compared a single dose of dexamethasone (0.6 mg per kg of body weight) with placebo. Dexamethasone use resulted in quicker resolution of the symptoms of croup, as well as less lost sleep, and, in the first 24 hours, less parental stress. However, the researchers did advise cautious use of dexamethasone in children with recent exposure to varicella or pre-existing immunodeficiency.

N Engl J Med 2004; 351: 1306-1313

**SMIFFING OUT MALIGNANCY**

UK researchers have successfully trained six dogs, of varying breeds and ages, to sniff out cancer. Using operant conditioning, they trained the dogs to distinguish between urine from patients with bladder cancer and urine from "controls" who were either healthy or had diseases other than bladder cancer. As a group, the dogs correctly detected three times as many cases as would have been expected by chance alone. It is thought that the dogs learned to detect a characteristic combination of odours — an "odour signature" — in urine from bladder cancer patients.

BMJ 2004; 329: 712-714

THE DYSGLYCAEMIC ICEBERG

Patients with diabetes make up only the tip of a much larger "dysglycaemic iceberg". Now, glycosylated haemoglobin (HbA_{1c}) has been shown to be a progressive risk factor for cardiovascular disease not only in people with diabetes but also in people without it.¹ In a UK study, which followed a cohort of more than 10000 adult men and women with and without diabetes for six years, each one-percent increase in HbA_{1c} above a normal level of 5% led to about a 20% relative increase in the incidence of cardiovascular events.² Further, most of these events occurred in people whose HbA_{1c} level fell between 5% and 6.9%.

1. *Ann Intern Med* 2004; 141: 475-476

2. *Ann Intern Med* 2004; 141: 413-420

MAYBE BABY

The promise of fertility restored via re-implantation of cryopreserved ovarian tissue has been fulfilled, with the report of the first live-birth using this technique. Five ovarian biopsy samples were taken from the left ovary of a 25-year-old woman before treatment for stage IV Hodgkin's lymphoma. The patient was cured of lymphoma but rendered infertile. Five years later, a team of Belgian physicians and researchers re-implanted the freeze-thawed ovarian tissue into the patient's peritoneum. The result (within two years): a take-home baby. Hopefully, the re-introduced tissue will not harbour any seeds of malignant cells overlooked by current screening methods.

The technique described offers hope to women wanting to extend their reproductive lives, as well as to women undergoing cancer treatment.

www.thelancet.com/extras/04art9230web.pdf

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