

# UPDATE

Abstracts and news from the medical literature of interest to the primary-care physician

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## Preventing Myocardial Infarction: Warfarin, Aspirin or Both?

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Researchers from Norway randomised 3,630 survivors of MI to warfarin, aspirin or aspirin plus warfarin.

On followup, 625 patients had at least one event. Compared with acetylsalicylic acid (ASA) alone, the combination of ASA and warfarin was associated with a 29 per cent lower risk of event,

warfarin alone with a 19 per cent lower risk. The three groups had nearly identical death rates, but rates of reinfarction and thromboembolic stroke were significantly lower in the two warfarin groups than in the aspirin alone group. Non-fatal bleeding was significantly common with warfarin alone and with combined therapy than with aspirin alone.

Hurlen M, Abdelnoor M, Smith P, et al: Warfarin, aspirin, or both after myocardial infarction. *N Engl J Med* 2002; 347:969-74.

Becker RC: Antithrombotic therapy after myocardial infarction. *N Engl J Med* 2002; 347:1019-22.

# No Sticky Situations with Duct Tape

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A recent study showed that treating warts using duct tape occlusion is more effective than cryotherapy. In the randomised, controlled study patients either:

- Wore duct tape for six days, removed the tape, soaked the wart, filed it with an emery board or pumice stone, re-applied new tape 12 hours later, repeated the process for up to two months; or
- Had cryotherapy applied every two to three weeks for a maximum of six treatments.

The duct tape occlusion therapy completely resolved warts in significantly more patients (85 per cent versus 60 per cent). The only complication from the duct tape was minor skin irritation.

Frocht DR III, Spicer C, Fairchok MP: The efficacy of duct tape vs. cryotherapy in the treatment of verruca vulgaris (the common wart). *Arch Pediatr Adolesc Med* 2002; 156:971-4.

Reingold S, Mendoza JA, Tarini BA, et al: Is duct tape occlusion therapy as effective as cryotherapy for the treatment of the common wart? *Arch Pediatr Adolesc Med* 2002; 156:975-7.

# An Alternative to EMLA

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A randomised crossover study shows that the easier to use local anesthetic ELA-Max is virtually as effective as the lidocaine-prilocaine mixture, EMLA, for reducing the pain of needle sticks.

The study, which took place in Iowa, applied EMLA and the lidocaine-only ELA-Max on the hands of 30 children who were to undergo an intravenous cannulation. EMLA must be applied 60 minutes before needle insertion, whereas ELA-Max can be applied only thirty minutes prior to needle insertion.

The range, mean, and paired pain scores were similar for both groups. However, the median pain score, which was rated on a validated pediatric pain scale (from 0 to 100), in the ELA-Max group was slightly higher than the score of the EMLA group (25 versus 10).

**BELONEPHOBIA**  
is the medical  
term for the  
fear of pins  
and needles.

Kleiber C, Sorenson M, Whiteside K, et al: Topical anesthetics for intravenous insertion in children: A randomized equivalency study. *Pediatrics* 2002; 110:758-61.

# Celiac Disease Instigator Identified

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If a patient with celiac disease ingests wheat, rye or barley, they are likely to suffer an inflammatory response. An international team of researchers believes that they have identified the peptide molecule that causes this effect.

When patients were exposed to the peptide their T cells proliferated aggressively. Also, homologues to the peptide are found in the grains known to cause the inflammation, but are absent from foods

like oats, rice and maize which do not cause inflammation.

Proteases in the small bowel cannot degrade this gluten peptide, making it capable of eliciting immune responses, and the peptide contains six to 10 antigenic epitopes that are known to induce T cell responses.

Celiac disease is a genetic disorder whose prevalence ranges from 0.5 per cent to one per cent in Western, Middle Eastern and Indian populations.

Shan L, Molberg O, Parrot I, et al: Structural basis for gluten intolerance in celiac sprue. *Science* 2002; 297:2275-9.

Schuppan D, Hahn EG: Gluten and the gut — Lessons for immune regulation; *Science* 2002; 297:2218-20.

# Post-Traumatic Stress Disorder: Is One Day's Rest Enough?

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A recent meta-analysis shows that single-session debriefing following a traumatic event may not necessarily be therapeutic for patients.

Researchers analyzed data from seven studies that investigated whether group or individual single-session debriefings were effective in preventing the onset of post-traumatic stress disorder (PTSD) and non-PTSD psychopathology.

The study included critical-incident stress debriefing (CISD) interventions, non-CISD interventions and no intervention control groups.

Standard assessments of patients for PTSD before and after the briefings showed that the briefings did not contribute to preventing or reducing symptoms of PTSD. In fact, outcomes appeared better among control subjects than among the people who attended CISD interventions.

van Emmerik AA, Kamphuis JH, Hulsbosch AM, et al: Single session debriefing after psychological trauma: A meta-analysis. *Lancet* 2002; 360:766-71.

Gist R, Devilly GJ: Post-trauma debriefing: The road too frequently travelled. *Lancet* 2002; 360:741-2.

# Is Radical Mastectomy Necessary?



Three studies show that long-term results after radical or total mastectomy, and breast-conserving therapy to treat breast cancer are similar.

A study conducted by Bernard Fisher and his colleagues did a 25-year followup with patients. In one branch of the study, 1,079 women with breast cancer and clinically negative axillary nodes were ran-

domised to receive either a radical mastectomy, a total mastectomy with post-operative radiation, or a total mastectomy without radiation. In all three cases there were no significant differences among groups in disease-free survival, distant-disease-free survival or overall survival.

These findings are supported by two other similar studies. In an Italian study started in 1973, women with tumours no larger than 2 cm were treated with either radical mastectomy or breast-conserving quadrantectomy with ipsilateral radiation. After a median 20-year followup, all-cause mortality and breast-cancer-specific mortality were essentially identical.

In an American study initiated in 1976, a 20-year followup showed there were no significant differences in overall survival, disease-free survival and distant-disease-free survival between 1,851 women who received total mastectomy, lumpectomy or lumpectomy combined with radiation.



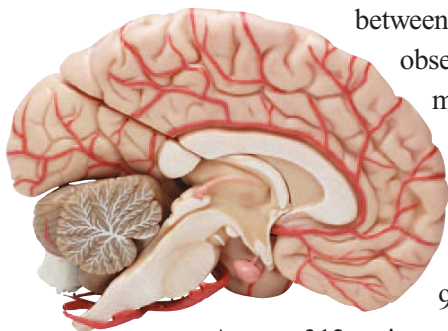
Veronesi U, Cascinelli N, Mariani L, et al: Twenty-year follow-up of a randomized study comparing breast-conserving surgery with radical mastectomy for early breast cancer. *N Engl J Med* 2002; 347:1227-32.

Fisher B, Anderson S, Bryant J, et al: Twenty-year follow-up of a randomized trial comparing total mastectomy, lumpectomy, and lumpectomy plus irradiation for the treatment of invasive breast cancer. *N Engl J Med* 2002; 347:1233-41.

Fisher B, Jeong JH, Anderson S, et al: Twenty-five-year follow-up of a randomized trial comparing radical mastectomy, total mastectomy, and total mastectomy followed by irradiation. *N Engl J Med* 2002; 347:567-75.

Morrow M: Rational local therapy for breast cancer. *N Engl J Med* 2002; 347:1270-1.

# Does Blood Pressure Help Identify Brain Lesions?



Investigators in Japan have found that blood pressure (BP) helps to distinguish between patients with and without anatomic brain lesions. The observational study, seeking to determine whether vital sign measurements are useful in evaluating impaired consciousness, examined 529 consecutive patients (mean age 65) who went to a Japanese emergency department with impaired consciousness of non-traumatic cause and Glasgow Coma scores lower than 15 (mean score 9.7).

Among 312 patients with anatomic brain lesions, the most common diagnosis was hemorrhagic or ischemic stroke (201) and subarachnoid hemorrhage (41). Mean systolic and diastolic blood pressure levels were significantly higher and mean pulse rate was significantly lower in patients with brain lesions than in those without lesions; systolic BP was the best discriminator. For example, among 43 people with systolic BP lower than 90 mmHg only two had brain lesions. In contrast, among 117 people with systolic BP of 180 or higher, 114 had brain lesions.

Ikeda M, Matsunaga T, Irabu N, et al: Using vital signs to diagnose impaired consciousness: Cross sectional observational study. *BMJ* 2002; 325:800-2.

# Accurately Diagnosing Acute Stroke

Diffusion-weighted MRI (DWI) is being used increasingly in acute-stroke patients and may be more accurate than computed tomography (CT). DWI is highly sensitive in detecting intracerebral hemorrhage and, used accurately, can provide subtle information about the location and extent of hyperacute ischemic injury.

Investigators compared the capabilities of DWI and CT within six hours of stroke onset in 50 patients. The order of scan performance was assigned randomly; mean delay from first to second scan was only 29 minutes.

With expert readers, the sensitivity and specificity of DWI was significantly better than that of CT for detecting the presence (sensitivities, 91 per cent and 61 per cent respectively; specificities, 95 per cent and 65, per cent respectively) and for determining the extent of acute infarctions as was interobserver agreement. With novice readers, DWI also had greater sensitivity and specificity than CT although novice readers' accuracy in detecting ischemic lesions with both imaging modalities was worse than that of more experienced observers. [Dx](#)

Fietsch JB, Schellinger PD, Jansen O, et al: CT and diffusion-weighted MR imaging in randomized order: diffusion-weighted imaging results in higher accuracy and lower interrater variability in the diagnosis of hyperacute ischemic stroke. *Stroke* 2002; 33:2206-10.