



No big risk

Obese patients are thought to have poorer outcomes after surgery than are people who are not obese. Daniel Dindo and colleagues investigated a cohort of over 6000 patients undergoing surgery to assess whether obesity affects the outcome of surgery. With the exception of increased incidence of wound infections after open surgery, patients who are obese did not have worse outcomes than those within normal weight ranges.

Lancet 2003;361:2032-5

Very sophisticated imaging

In many types of cancer, nodal disease is an independent adverse prognostic factor. However, measurement of the nodes is the only widely accepted method of assessing nodal involvement by means of imaging.

The specificity and negative predictive value of nodal staging according to size are moderate at best. Clearly, a more accurate image-based method of distinguishing malignant from nonmalignant lymph nodes is needed.

Harisinghani and colleagues have recently reported the use of lymphotropic superparamagnetic nanoparticles, a novel MRI contrast agent, in the nodal staging of prostate cancer. Seventy one per cent of malignant nodes detected with MRI with lymphotropic superparamagnetic nanoparticles were smaller than the threshold size (10 mm) used to identify nodal disease on conventional imaging.

The results of the study demonstrate that imaging can be used to identify metastatic infiltration in nodes measuring 5 to 10 mm. This has important implications, because the technique may be used to select patients for extended lymphadenectomy or to delineate radiotherapy fields.

N Engl J Med 2003;348:2491-9

Drugs for dementia?

Four medications have been used for the symptomatic treatment of patients with Alzheimer disease. These are tacrine, donepezil, rivastigmine and galantamine. All are cholinesterase inhibitors that produce essentially the same degree of modest improvement in approximately 30% to 40% of patients with mild to moderate Alzheimer disease. The drugs have different organ toxicities, side effects, and dosing frequencies.

Vitamin E has demonstrated efficacy in slowing the progression of Alzheimer disease, and clinical trials are evaluating the ability of vitamin E to delay the onset of dementia in persons with mild cognitive impairment.

The most promising therapies for Alzheimer disease are probably those that prevent formation of neurofibrillary tangles and senile plaques and thus reduce the apoptotic

death of neurons. The most promising advances are the development of drugs that block the formation of the β -amyloid peptide and a novel strategy to induce an immunologic response capable of clearing the amyloid plaques already formed. It remains to be seen whether the startling results of these strategies that have been seen in animals can be safely duplicated in humans.

Ann Intern Med 2003;138:400–10

Endangered species?

Helicobacter pylori is in steep decline in many parts of the world, thanks to improved sanitation and the widespread use of antibiotics, and some biologists are beginning to wonder whether its disappearance is really for the best. In the West, the bacterium's demise has been dramatic – half of the US population aged 60 and over are infected with *H. pylori* compared with only 20% of those under 40.

Although most gastroenterologists view *H. pylori*'s disappearance with satisfaction, other researchers point to hints that the bacterium may help to protect against conditions such as infant diarrhoea and oesophageal disease. Some experts say that removing an important member of our intestinal flora will have unforeseen consequences for our inner ecosystem, and so our health. 'We have no good sense of the microbial ecology of humans,' say infectious-disease specialist Julie Parsonnet of Stanford University in California. '*H. pylori* infection revs up the immune system – what happens to our ability to respond to other infectious agents when that isn't there?'

Nature 2003;423:583–4