

## Treating esophageal cancer in gastrectomized patients

A new study from Japan has shown that surgical treatment for esophageal cancer is safe in gastrectomized patients, despite the complicated nature of such an approach.

This retrospective study by Wada *et al.* included 948 patients who had undergone surgery for primary thoracic esophageal cancer. Of these, 72 (7.6%) patients had a history of partial or total gastrectomy because of gastric cancer or peptic ulcer. The operative time was longer in these patients than in the non-gastrectomized group, partly because it was necessary to use the colon or jejunum, rather than the gastric tube, for esophageal replacement. Operative mortality and blood loss, however, were similar in the two groups.

Overall and cause-specific survival rates were significantly higher in gastrectomized patients. The authors suggest that this might have been due to differences in the 'biological behaviors' of esophageal cancer in patients who have undergone gastrectomy. Among the gastrectomized patients, tumors tended to be at a lower position in the esophagus. In the gastrectomized group, the most common gross tumor morphology was expansive growth, whereas the non-gastrectomized patients were more likely to show an infiltrative pattern.

Wada *et al.* conclude that gastrectomized patients have a favorable prognosis following surgery for esophageal cancer, and that this treatment is warranted. Ongoing studies will explore the potential of chemotherapy or radiotherapy to further improve outcomes.

**Original article** Wada H *et al.* (2005) Clinical outcome of esophageal cancer patients with history of gastrectomy. *J Surg Oncol* **89**: 67–74

## Advances in preoperative nodal staging for bladder cancer

In their recent study, Deserno *et al.* have shown that ferumoxtran-10-enhanced MRI is superior to nonenhanced MRI in detecting metastatic lymph nodes in patients with bladder cancer. Importantly, this method does not rely on nodal size or shape to distinguish between benign and malignant nodes.

Fifty-eight patients with bladder cancer underwent MRI before and 24–36 hours after intravenous injection of ferumoxtran-10 iron-oxide nanoparticles. Precontrast images were interpreted on the basis of node size; round nodes larger than 8 mm or oval nodes of axial diameter greater than 10 mm were defined as malignant. Postcontrast images were interpreted by comparing them with the precontrast images; benign nodes show a homogenous decrease in signal intensity due to the accumulation of iron oxide in the nodal macrophages, whereas metastatic nodes show either a heterogeneous decrease or no decrease in signal, since the normal macrophages are replaced with cancer cells.

By comparing the MRI results with histologic findings for 172 dissected nodes, the authors showed that the sensitivity of ferumoxtran-10-enhanced MRI was significantly better than that obtained using precontrast images alone (96% vs 76%,  $P < 0.01$ ) and that the negative predictive value was also significantly improved (98% vs 91%,  $P < 0.01$ ).

Noting that ferumoxtran-10-enhanced MRI could be used to identify metastases even in normal-sized nodes, the authors conclude that the technique allows superior preoperative nodal staging in patients with bladder cancer, compared with standard, nonenhanced MRI.

**Original paper** Deserno WMLLG *et al.* (2004) Urinary bladder cancer: preoperative nodal staging with ferumoxtran-10-enhanced MR imaging. *Radiology* **233**: 449–456