

GLOSSARY

DOPPLER ULTRASONOGRAPHY WITH PERFUSION SOFTWARE AND CONTRAST AGENT INJECTION (DUPC)

A non-invasive diagnostic imaging technique used to examine changes in blood flow and vascularization

CLASICC

Conventional versus laparoscopic-assisted surgery in colorectal cancer; a multicenter, randomized, controlled trial conducted by the Medical Research Council

Effective early evaluation of isolated limb perfusion in the treatment of limb sarcoma

Isolated limb perfusion (ILP) is a safe and effective method for administering high doses of antineoplastic agents to a surgically isolated limb, allowing conservative excision of the residual tumor and avoiding the need for amputation. Lassau and colleagues at the Institute Gustave Roussy, France, have recently undertaken a prospective study of DOPPLER ULTRASONOGRAPHY WITH PERFUSION SOFTWARE AND CONTRAST AGENT INJECTION (DUPC) as an alternative to MRI for evaluating the efficacy of ILP in patients with locally advanced soft tissue sarcoma. The authors advocate the proposal of a new treatment-planning system based on the results of this study.

Patients enrolled in a large, randomized trial of tumor-necrosis factor- α therapy for soft tissue sarcoma were recruited to undergo DUPC the day before ILP and on days 1, 7, 15, 30, and 60 post-ILP. A decrease in contrast agent uptake of greater than 50% (DUPC) or tumor necrosis of >90% (MRI and histologic analysis) were indicative of a good response. A good response was observed in 25 out of 49 evaluable patients, as determined by MRI, histologic assessment and tumor necrosis. This response was predicted by DUPC at day 1 after ILP in 82% of all patients. At day 15 after ILP, the positive predictive value of DUPC was 100%. The authors conclude that the results of DUPC are comparable to MRI, but provide an earlier indication of response to ILP.

Alexandra King

Original article Lassau N *et al.* (2005) Doppler US with perfusion software and contrast medium injection in the early evaluation of isolated limb perfusion of limb sarcomas: prospective study of 49 cases. *Ann Oncol* 16: 1054–1060

Laparoscopic bowel resection: comparable efficacy to that of open surgery in patients with colon cancer

Initial results of the CLASICC trial have recently been presented in the *Lancet* by Guillou and co-workers. This study aimed to compare the short-term outcomes of laparoscopic resection with those of conventional open surgery in patients with colorectal cancer and to make

predictions for long-term implications of the laparoscopic-assisted procedure. Patients with cancer of the colon or rectum were recruited from 27 UK centers between July 1996 and July 2002 and were randomized 2:1 to undergo either open or laparoscopic bowel surgery.

Of 794 randomized patients, 737 underwent surgery; 253 in the laparoscopy group and 484 in the open surgery group. Crossover from laparoscopy to open surgery occurred in 143 patients. There was no significant difference between the two groups in the proportion of Duke's C2 tumors, in-hospital mortality, number of positive circumferential resection margins, complications during and after surgery, transfusion requirements, or quality of life. Rectal cancer and conversion to the laparoscopic procedure were associated with an increased frequency of intraoperative complications, and conversion during surgery resulted in a slightly higher death rate, although neither of these trends were significant.

The authors conclude that, in the short-term, laparoscopic resection and conventional surgery are comparably effective in patients with colon cancer, and they do not predict that long-term outcomes will differ significantly. However, they recommend that the decision to routinely adopt laparoscopic-assisted surgery for patients with rectal cancer should not be taken until further data are available: 3-year cancer-related mortality and disease-free survival are currently being analyzed.

Alexandra King

Original article Guillou PJ *et al.* (2005) Short-term endpoints of conventional versus laparoscopic-assisted surgery in patients with colorectal cancer (MRC CLASICC trial): multicentre, randomized controlled trial. *Lancet* 365: 1718–1726

TP53 mutations as a prognostic factor in women with breast cancer

Mutations in the tumor suppressor gene *TP53* have previously been described as a prognostic factor associated with worse outcome for a variety of different malignancies. In a recent Swedish study, Andersson and colleagues have investigated the *TP53* gene, describing the prognosis and prognostic value of *TP53* mutations in 376 women with node-positive breast cancer who received CMF (cyclophosphamide, methotrexate, 5-fluorouracil) and/or tamoxifen therapy.