Contemporary perioperative care strategies

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BACKGROUND
Historically, the preoperative and postoperative care of patients with gastrointestinal cancer was provided by surgeons. Contemporary perioperative care is a truly multidisciplinary endeavour with implications for cancer-specific outcomes.

METHODS
A literature review was performed querying PubMed and the Cochrane Library for articles published between 1966 to 2012 on specific perioperative interventions with the potential to improve the outcomes of surgical oncology patients. Keywords used were: fast-track, enhanced recovery, accelerated rehabilitation, multimodal and perioperative care. Specific interventions included normothermia, hyperoxygenation, surgical-site infection, skin preparation, transfusion, non-steroidal anti-inflammatory drugs, thromboembolism and antibiotic prophylaxis, laparoscopy, radiotherapy, perioperative steroids and monoclonal antibodies. Included articles had to be randomized controlled trials, prospective or nationwide series, or systematic reviews/meta-analyses, published in English, French or German.

RESULTS
Important elements of modern perioperative care that improve recovery of patients and outcomes in surgical oncology include accelerated recovery pathways, thromboembolism and antibiotic prophylaxis, hyperoxygenation, maintenance of normothermia, avoidance of blood transfusion and cautious use of non-steroidal anti-inflammatory drugs, promotion of laparoscopic surgery, chlorhexidine-alcohol skin preparation and multidisciplinary meetings to determine multimodal therapy.

CONCLUSION
Multidisciplinary management of perioperative patient care has improved outcomes.