

Perioperative Medicine Commission

Clinical practice statement on perioperative management of major cancer surgery

19.06.2024

On May 3rd, 2024, the Perioperative Medicine Commission of the Swiss Society for Anaesthesiology and Perioperative Medicine organized a symposium entitled “New Horizons in the Perioperative Management of Cancer Patients.” This summary presents the most relevant aspects for clinical practice based on the presentations and discussions.

Topic 1: Neoadjuvant Chemo- and Immunotherapy Before Major Cancer Surgery

1. Neoadjuvant chemo- and immunotherapy can increase survival rates after cancer surgery. For every type of cancer, specific neoadjuvant treatment schemas are available (e.g., gastrectomy: FLOT regimen – Fluorouracil, Leucovorin, Oxaliplatin, Taxotere).
2. Certain treatments may induce cardiac (e.g., anthracyclines, anti-HER2) and pulmonary toxicities (e.g., anti-HER2, immune checkpoint inhibitors). Preoperative communication with the oncology department is essential to clarify (a) the administered neoadjuvant treatment; (b) potential organ toxicity, which may be discussed during the tumor board and (c) toxicity surveillance programme.
3. Preoperative risk assessment should include respiratory rate, SpO₂, swallowing, and cardiac biomarkers.
4. This is a rapidly evolving field where new therapies with unknown toxicities are expected to emerge frequently.

Topic 2: Preoperative Assessment Before Major Cancer Surgery

5. Cancer is a significant independent risk factor for postoperative mortality, thus cancer patients should be considered high-risk.
6. A detailed preoperative assessment should include frailty estimation, perioperative cardiac risk estimation (Revised Cardiac Risk Index and cardiac biomarkers), pulmonary assessment (ARISCAT score including smoking history), sepsis risk (considering diabetes, obesity, immunosuppression), and mortality risk estimation.
7. Based on this comprehensive risk assessment, individualized clinical pathways should be designed, including transfer to specialized centers.

8. Patients and their proxies should be involved in defining the final goals of perioperative care (e.g., disability-free survival), optimal advance care plans, and treatment preferences (shared decision-making).

Topic 3: Prehabilitation Before Major Cancer Surgery

9. Prehabilitation aims to enhance functional capacity and physiological reserve, thereby facilitating recovery after surgery. Exercise is a key component and may reduce pulmonary complications and length of hospital stay. Prehabilitation can be initiated during and after preoperative neoadjuvant treatment.
10. Successful prehabilitation requires selecting high-risk patients willing to engage in an individualized, major multimodal program of at least 2 weeks, including education, reassessment, and follow-ups.
11. A comprehensive multimodal prehabilitation program should encompass a thorough assessment and targeted enhancement of functional capacity through various means, including exercise, nutrition, lifestyle modifications, psychological support, patient blood management, and optimization of co-morbidities and medical conditions.

Topic 4: Prolonged Monitored Care After Major Cancer Surgery

12. Major risk factors for early mortality after major cancer surgery include postoperative systemic hyper-inflammation, hypotension, bleeding, and sepsis.
13. Specific postoperative care can reduce mortality after major cancer surgery and can be safely performed in specialized intermediate care units (IMCs).

Topic 5: Patient-Reported Outcomes After Major Cancer Surgery

14. Healthcare professionals often overlook patient-relevant symptoms such as pain, dyspnea, insomnia, anorexia, thirst, and constipation. Identifying and addressing these symptoms could reduce postoperative mortality and increase comfort after major cancer surgery.
15. The severity of disability and impairment of quality of life 3-12 months post-surgery are critical outcomes, especially in elderly or frail patients. As they can influence the preoperative decision making process in these populations they should be considered in research programs and quality improvement initiatives.