

What is the cut-off value of Surgical Apgar Score which predicts the complicated postoperative evolution of the surgical oncological patient?

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Introduction: The surgical Apgar score (SAS), which quantifies blood loss, lowest mean blood pressure and lowest heart rate during surgery may be easily calculated at the end of surgery and varies between 0-10 points. Previous studies reported that a low SAS is associated with a complicated outcome.

Objective: The study aims to calculate the cut-off value of SAS which predicts the complicated postoperative evolution.

Methods: The prospective observational study enrolled all consecutive oncological patients submitted to surgery in Regional Institute of Oncology Iași between 29.01-19.02.2018. SAS was calculated at the end of surgery. The complicated postoperative evolution was assessed by the presence of early organ dysfunctions, postoperative complications (medical/surgical) and the discharge status (alive/deceased). Early cardio-vascular, renal and metabolic dysfunctions were defined as the need for hemodynamic support, the rise of serum creatinine $\geq 1,5$ preoperative value and serum lactate > 2 mmol/l. Medical and surgical complications were defined according to recognized criteria. The statistical analysis was performed with Excel+Analyse-it®.

Results: The study group included 205 patients: early postoperative dysfunction – 26 patients (12,7%); postoperative complications – 33 patients (16%) and mortality – 15 patients (7,3%). The median value of SAS was 8. SAS ≤ 8 was strongly associated with the occurrence of cardiovascular dysfunction (OR=12,7;IC95%=2,77-58; p<0,0001), of postoperative complications (OR=2,35;IC95%=1,1-5; p<0,05), and of death (OR=4,6;IC95%=1,41-15; p<0,01) and SAS ≤ 7 was associated with the occurrence of renal (OR=3,6;IC95%=1,3-9,8; p<0,05) and metabolic dysfunction (OR=14,5;IC95%=3,7-56,6; p<0,0001).

Conclusions: The Surgical Apgar Score is a simple and useful tool to predict the complicated postoperative evolution of the oncological patient and a cut-off value of 7 predicts a complicated outcome.

Key words: oncological patient, Surgical Apgar Score, postoperative outcome.

Evolution of the elderly surgical oncologic patient. Case Analysis

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Introduction: The old (≥ 65 years) patient is common in modern surgery and implies complex challenges regarding the perioperative management and outcome.

Objective: The analysis of epidemiological and outcome data in old oncologic patients submitted to surgery.

Method: The retrospective observational study included all old oncologic patients submitted to surgery between 1.01-31.12.2017 in IRO Iași. Recorded parameters: age, data about cancer (organ, stage), co-morbidities, ASA score, data about surgery (organ, type, minor/major, duration), type of anesthesia, ICU length of stay, complications and outcome. Statistical analysis was performed with SPSS and MEDCALC.

Results: The study group included 971 patients ≥ 65 years, which represent 23% of all oncological patients submitted to surgery during 2017 in IRO Iași. 67% pts were between 65-74 years. 498 pts (51%) had digestive cancer. 577 pts (60%) were ASA III. 939 pts (97%) had general anesthesia. In 502 pts (81%) surgery was performed with the intent to cure. In 268 pts (26%) total resection of single/multiple organs was performed. Mean duration of surgery was 127(10-450) minutes. 35 pts (4%) needed postoperative mechanical ventilation. The most frequent postoperative complication was renal failure (80 pts, 8.2%). 6 patients (0.6%) died.

Conclusions: The old oncologic patient is frequently submitted to major, long-lasting surgery with the intent to cure. The constant application of multiple strategies in order to optimize the perioperative course results in low postoperative complications and mortality.

Key words: old oncologic patient, perioperative management.