Evaluation and analysis of postoperative complications after primary cytoreduction for 47 cases of advanced epithelial ovarian cancer at stage III and IV

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Objective
- To evaluate perioperative complications and identify risk factors associated with postoperative complications after primary cytoreduction for 47 cases of advanced epithelial ovarian cancer.

Methods
- Patients: 47 cases of advanced epithelial ovarian cancer at stage III and IV, from January 2016 to December 2017.
- Surgical procedures:
  - 31 patients underwent total hysterectomy, bilateral salpingo-oophorectomy, and peritonectomy.
  - 16 patients had extended upper abdominal surgery (EUAS).
- Complications: 1. Infection: 13 patients reported grade 3 complications.
  - Septic complications: 7 patients (53.85%) were dehiscent and infected after surgery.
  - Acute abdomen: 2 patients with acute abdomen were found within 1 week after surgery, and the other 2 patients within 2 weeks.
  - Postoperative sepsis: 2 patients died because of postoperative sepsis.

Results
- 13 patients reported grade 3-5 complications, and wound abnormal healing was the most common grade 3-5 complications, occurring in 14.89% of patients.

Conclusions
- Both large and small bowel resection with one anastomosis was not found to increase anastomotic leakage.
- Less than 50% of optimal cytoreduction have the requirement of EUAS to obtain complete cytoreduction.

References

Introduction
- Ovarian carcinoma is the highest mortality rate in female malignant genital tumors [1].

Methods
- Patients: All patients underwent surgical procedures between September 2017 and March 2019 at our center.
- Underwent cytoreduction, whether or not optimal cytoreduction.
- Stage III and IV.
- Epithelial ovarian and fallopian tube carcinoma.

Objectives
- Postoperative complications: occurring within 60 days after surgery, evaluated and graded according to Clavien–Dindo Classification of Surgical Complications[7].
- Mortality: any death occurring within 60 days of surgery.

Assessments
- Potential variables and postoperative complications.

Results
- Clinical characteristics and treatment of patients:
  - Age of the 47 enrolled patients. 48 upper abdominal procedures performed on 22 patients, and many patients had more than one of the listed procedures. Seven patients had 3 of the listed procedures, four patients had 2 of the listed procedures, and 11 patients had 1 procedure.

Table 1: Characteristics of patients

Table 2: Surgical procedures

Table 3: Postoperative complications (n=47)

Table 4: Anatomical technique

Postoperative complications of primary cytoreduction:
- 13 patients reported grade 3-5 complications, and wound abnormal healing was the most common grade 3-5 complications, occurring in 14.89% of patients.
- Anastomosis leakage at grade B were found in the total colon resection patients, and were recovered by drainage and rinsing.

Risk factors associated with postoperative complications:
- Univariate analysis identified American Society of Anesthesiologists (ASA) class (P=0.038) and estimated blood loss (P=0.049) were associated with overall complications, and were consistent in multivariate analysis (P=0.041 and P=0.020).

Table 5: Univariate and multivariate analyses of factors associated with postoperative complications

Both large and small bowel resection with one anastomosis was not found to increase anastomotic leakage. More than 50% of optimal cytoreduction have the requirement of EUAS to attain complete cytoreduction.

Postoperative complications after primary cytoreduction:
- Septic complications: 7 patients (53.85%) were dehiscent and infected after surgery.
- Acute abdomen: 2 patients with acute abdomen were found within 1 week after surgery, and the other 2 patients within 2 weeks.
- Postoperative sepsis: 2 patients died because of postoperative sepsis.

Conclusions
- Extensive procedures should be cautious for those patients with high ASA score.

References