Conclusion 1) Healing of anastomosis differs between both groups according to different character of the diseases. 2) Possibility to save mesorectum and bowel vascularization in minimal invasive ‘tailored’ technique in patients with DIE doubtless has significant impact on anastomosis quality – reduces its risk. 3) ICG vascularization control, securing materials usage reduce bowel anastomosis leak risk. 4) Bowel anastomosis distance from the ‘Z’ line has lower impact on its quality than other analyzed features – significantly lower in patients with DIE.

Introduction/Background High dependency surgical units represent a major advance in the perioperative management of patients undergoing major abdominal surgical operations, including those performed for gynecologic oncology. Cognitive impairment has been established in the setting of prolonged hospitalization in intensive care units however, remains poorly explored in the HDU setting.

Methodology We performed a prospective observational study to evaluate the impact of HDU hospitalization on cognitive function of gynecological cancer patients. Prior to inclusion in the study, we screened eligible patients for depressive disorders using the Patient Health Questionnaire-9 (PHQ-9) and for severe cognitive dysfunction with the Hopkins verbal learning test. Identification and omission of cases with severe memory disability was performed with the Short Portable Mental Status Questionnaire (SPMSQ). Evaluation of differences in the perioperative cognitive performance of patients was performed with the Quick Mild Cognitive Impairment tool (QMCI).

Results Overall, 40 patients were enrolled in the present study. Of those 14 patients were hospitalized in the HDU for a period of 2 days (1–4). Differences in cognitive function were subtle and did not reach statistical significance in either group. However, a subtle decrease in cognitive function was observed among patients admitted to the HDU (presurgical score 68 (64 – 71) vs postsurgical 71 (64–91), p=.202) whereas a comparable decrease was observed among patients admitted to the NICU (presurgical score 62 (55,37 − 66,37) vs postsurgical score 59,25 (53,37−77), p=.227. Of note, the difference in postsurgical scores among the two groups was significant (p=.021)

Conclusion Subtle differences are observed among patients admitted to the high dependency unit even for a short follow-up period. This should be kept in mind by physicians which should restrict HDU hospitalization in the minimum required interval. Further studies in specific populations (octogenarian, patients admitted for prolonged duration) are needed to help optimize their cognitive performance.