required to assess whether patients undergoing MIRRORS-protocol have non-inferior overall-survival compared to open interval CRS.

RECURRENCE PATTERNS IN PATIENTS WITH OVARIAN CANCERAFTER NEOADJUVANT CHEMOTHERAPY, WITH AND WITHOUT HIPEC. REPORT OF 33 FIRST CASES

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Introduction/Background Ovarian cancer (OC) is the eighth leading cause of cancer in women worldwide, with high mortality due to the advanced stage at which it is diagnosed. Neoadjuvant chemotherapy is a treatment option in patients who are not candidates for primary surgery. HIPEC (Hyperthermic Intraperitoneal Chemotherapy) is a treatment option during interval laparotomy. Our objective is to present the patterns of recurrence between patients treated with chemotherapy and interval surgery and those who underwent HIPEC, within an institutional protocol.

Methodology The review of 33 patients who were treated between 2016–2022 was carried out, 17 of them underwent HIPEC during interval laparotomy. Demographic variables and sites of recurrence, as well as disease status, were analyzed.

Results During a median follow-up of 36 months, from 16 cases in the non-HIPEC group, there were 8 recurrences (50%): 2 systemic (lung, liver), 1 in the groin, 2 in the perigastric nodes, 1 peritoneal, and 1 in the gastric wall; while in the HIPEC group, 6 patients (35.3%) recurred: 3 systemic, 1 in a pelvic node and 2 in peritoneum. In the non-HIPEC group, there were 6 (37.5%) deaths, 4 (25%) patients are alive with disease, and 6 alive without evidence of disease. In the HIPEC group, 5 (29.4%) patients died, 3 (17.6%) are alive with disease, and 9 (52.9%) are alive without disease.

Conclusion Various patterns of recurrence have been reported in patients after interval surgery, being the peritoneum and abdominopelvic lymph nodes the most frequent sites; and post-HIPEC recurrence are most common in visceral tissues. In our series, the recurrences are highly variable in the non-HIPEC group, with systemic disease being the most common; in the HIPEC group, systemic recurrences are more alike with usual patterns in OC, however, the peritoneum continues to be a point of relapse despite the HIPEC.

THE POTENTIAL ROLE OF HUMAN FACTORS IN THE PREDICTION OF SURGICAL EFFORT IN ADVANCED-STAGE EPITHELIAL OVARIAN CANCER PATIENTS; A STUDY USING EXPLAINABLE ARTIFICIAL INTELLIGENCE

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Introduction/Background Surgical cytoreduction for epithelial ovarian cancer (EOC) is a complex procedure, whereas that intra-operative surgical decision-making remains a core feature. Explainability Artificial Intelligence (XAI) could potentially interpret the influence of human factors on the surgical effort for the cytoreductive outcome in question.

Methodology The retrospective cohort study evaluated 560 consecutive EOC patients who underwent cytoreductive surgery between January 2014 and December 2019 in a single UK institution. The eXtreme Gradient Boosting (XGBoost) was employed to develop the predictive model including patient- and operation-specific features, readily available in tertiary centers, and novel features reflecting human factors in surgical heuristics. The area under the curve (AUC) was used to evaluate model performance. The SHapley Additive exPlanations (SHAP) framework was used to provide global and local explainability of the predictive model.

Results A surgical complexity score (SCS) cut-off value of five was calculated using a receiver operator characteristic (ROC) curve, above which the probability of incomplete cytoreduction was more likely (area under the curve [AUC] =0.644; 95% [CI]=0.598–0.69; sensitivity and specificity 34.1%, 86.5%, respectively; p=0.000). The XGBoost model performance for the prediction of the above threshold surgical effort outcome was satisfactory (AUC=0.77; 95%[CI] 0.69–0.85; p<0.05). 'Turning points' showing preference towards above-given threshold surgical effort included; consultant surgeons with <12 years of experience, age <53 years old, who, when attempting primary cytoreductive surgery, recorded the presence of ascites, an Intraoperative Mapping of Ovarian Cancer score >4, and a Peritoneal Carcinomatosis Index >7, in a surgical environment with optimization of infrastructural support.

Conclusion Surgical intra-operative decision-making is critically layered upon situational awareness and the impact of human factors. We demonstrated a fine balance between predictive accuracy and descriptive interpretability. Using XAI, we provided a two-layered explainability and we pinpointed the most salient feature interactions. Selected decreased surgical effort may be associated with surgeon age.

SECONDARY CYTOREDUCTIVE SURGERY IN PLATINUM-SENSITIVE RELAPSED OVARIAN CANCER: REAL-WORLD EXPERIENCE FROM AN INDIAN CANCER CENTRE

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Introduction/Background Survival benefit of secondary cytoreductive surgery (SCS) in platinum-sensitive relapsed ovarian cancer (PSROC) has been demonstrated in recent randomised controlled trials. Data on SCS for PSROC from resource-limited settings are scarce. This study aimed to evaluate the perioperative and oncologic outcomes of SCS in Indian women with PSROC.

Methodology A review was conducted for all patients who underwent SCS for PSROC between 2012 and 2021 at Tata Medical Center. Clinical information including patient and disease characteristics, surgical details, and survival data was