case of PMP arising from malignant transformation of a mature teratoma, followed by review of current literature.

Methodology

Case presentation A 57-year-old female presented to gynaecology clinic with abdominal distension and radiological findings of a large pelvic mass and large volume mucinous ascites. At laparotomy, a pre-operatively ruptured 30 cm right ovarian mucinous mass, with 20L of gelatinous mucinous ascites and mucoid material adherent to multiple peritoneal surfaces (Peritoneal Cancer Index 23) in keeping with PMP was found. An incomplete cytoreduction was performed. A high grade appendiceal-like mucinous neoplasm arising in mature teratoma was diagnosed, with positive CK7 and CK20 staining. The appendix was microscopically normal. Peritoneal mucoid deposits were found to be acellular. Recommendation was made for conservative management with no further cytoreductive surgery or hyperthermic intraperitoneal chemotherapy (HIPEC). Patient has no evidence of progression at 3 months post-surgery.

Results There are 13 published manuscripts describing PMP arising from ovarian teratoma with a total of 29 cases. Immunohistochemistry profile including CK7 and 20 appear to be variable. Most cases were treated with cytoreductive surgery, with a small number of cases having adjuvant chemotherapy or HIPEC. The risk of intra-abdominal recurrence in patients treated for PMP arising from ovarian teratoma remains unknown, however this review indicates a more favourable prognosis compared to the classic PMP from LAMN.

Conclusion PMP arising from ovarian teratoma remains a rare entity with paucity of evidence to guide optimal treatment. Prognosis is difficult to ascertain due to the lack of longitudinal follow-up data.

Introduction/Background Several scientific publications that compare robotic and conventional laparoscopy surgery reveal some advantages for the patient of robotic surgery in certain gynecological procedures and pathologies. However, some authors consider the use of the surgical robot inefficient. Our aim is to evaluate whether robotic surgery could be a real benefit in terms of perioperative outcomes and morbidity without affecting oncological safety.

Methodology Data from 534 patients were collected, 347 of them were operated by robotic surgery (RS) and 187 by conventional laparoscopic approach (CL). A comparative study between both approaches was performed in a tertiary hospital from 2007 to 2019. Patients with endometrial, ovarian and cervical carcinoma were included. Basic demographic characteristic, surgical outcomes, morbidity and survival were compared. Procedures performed were hysterectomy with double adnexectomy, hysterectomy with lymphadenectomy (pelvic or pelvic and para-aortic), radical hysterectomy and para-aortic lymphadenectomy.

Results Total operation time was significantly longer in patient operated by robotic surgery (RS 209 minutes vs. 191 min CL; p=0.006). Blood loss was reduced in patients operated by robotic approach (RS 112 ml vs. CL 136 ml; p=0.020). No differences were found in hospital stay, number of pelvic or paraaortic nodes, laparotomy conversion or reintervention rate and intra or postoperative complications between both surgical approaches. Overall survival was similar in both surgical approaches although disease free survival was 85% in the robotic group and 90.7% in the laparoscopic group (HR: 0.47; IC95%:0.26–0.86; p=0.015). In a multivariate analysis the only independent factor related to disease free survival was FIGO stage.

Conclusion Robotic surgery and conventional laparoscopy are comparable in terms of perioperative morbidity, conversion rate, hospital stay, number of nodes obtained, or overall survival. Robotic surgery increases total operative time and reduces intraoperative bleeding compared to laparoscopy.