IMPACT OF SARS-COV-2 ON TRAINING AND MENTAL WELLBEING OF SURGICAL GYNAECOLOGICAL ONCOLOGY TRAINEES

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Introduction/Background* The SARS-CoV-2 global-pandemic has caused a crisis disrupting health systems worldwide. Whilst efforts are afoot to determine the extent of disruption, impact on gynaecological oncology trainees/training has not been explored. We present data from an international survey on impact of SARS-CoV-2 on clinical practice, medical education, and mental wellbeing of surgical gynaecological oncology trainees.

Methodology In our prospective cohort study, a customised web-based-survey was circulated to surgical gynaecological oncology trainees from national/international organisations (May-November 2020). Validated questionnaires assessed mental wellbeing. Wilcoxon rank sum test and Fisher’s exact test tested hypothesis about differences in means and proportions. Multiple linear regression evaluated effect of variables on psychological/mental wellbeing outcomes. Outcomes included clinical practice, medical education, anxiety & depression, distress, mental wellbeing.

Results* 127 trainees from 34 countries responded. 52% (66/127) were from countries with national training programmes (UK/USA/Netherlands/Canada/Australia) and 48% (61/127) from non-national training programme countries. 28% had suspected/confirmed COVID19; 28% experienced drop in household income; 20% self-isolated from households; 45% had to re-use personal protective equipment and 22% purchased their own. 32.3% (41/127) trainees (national training programme trainees=16.6% (11/66); non national training programme trainees=49.1% (30/61), p=0.02) require additional time to complete their training fellowship. The additional training time anticipated did not differ between trainees from countries with/without national training programmes (p=0.11). Surgical training was detrimentally impacted for 50% trainees, with more national training programme trainees (62.3% (38/61) than non national training programme trainees (38.5% (25/65), p=0.01) reporting a detrimental impact despite a greater reduction in mean surgical exposure reported by non national training programme trainees. Departmental teaching continued throughout the pandemic for 69% (87/126) trainees, albeit at reduced frequency for 16.1% (14/87), and virtually for 88.5% (77/87). Trainees reporting adequate pastoral support had better mental wellbeing with lower-levels of anxiety/depression (p=0.02) and distress (p<0.001). National training programme trainees experienced higher levels of distress (p=0.01). Mean mental wellbeing scores were significantly higher pre-pandemic (8.3 (SD=1.6) versus post-pandemic (7 (SD=1.8);p<0.01).

Conclusion* SARS-CoV-2 has negatively impacted surgical training, household income and psychological/mental wellbeing of surgical gynaecological oncology trainees. Overall clinical impact was worse for non national training programme versus national training programme-trainees, though national-training-programme-trainees reported greater distress. COVID19-sickness increased anxiety/depression. The recovery-phase must focus on improving mental-wellbeing and addressing lost training opportunities.
Gynaecological Oncology surgery between high/high and medium/low HDI country settings

**Result(s)** The GO SOAR Collaborative aims to improve surgical outcomes through collaborative research. It will provide risk adjusted patient level outcome data collected via a centralised database to advise HDI country group specific policy formation.

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**Introduction/Background** Significant intraoperative blood loss can be encountered in complex pelvic surgery and impact on post-operative outcomes. There are a number of key anaesthetic techniques that can be used to optimise a patient in preparation for and to mitigate against predicted and unpredicted blood loss.

**Methodology** We performed a systematic review of the literature to identify the current perioperative anaesthetic strategies for optimisation of the patient and reducing blood loss in complex pelvic surgery.

**Result(s)** This article explores the pre-operative and intraoperative techniques to reduce both the volume and physiological impact of blood loss.

**Conclusion** Preoperative optimisation aims to identify patients that are at risk. This includes those with significant comorbidities or abnormal clotting disorders. Anticoagulation/antiplatelet therapies may require adjustment. Pre-operative anaema should also be managed.

Intraoperative techniques are essential for reducing the rate of blood loss. Hypothermia leads to reversible disruption of the coagulation cascade and therefore techniques to maintain normothermia are required. Relative hypotension and avoidance of tachycardia both reduce blood loss but require close monitoring to ensure adequate tissue perfusion. Using regional anaesthesia can further support this. The use of pharmacological agents, such as tranexamic acid, have been demonstrated to reduce blood loss in pelvic surgery. Blood products such as clotting factors can specifically target and correct coagulopathies using point of care testing. Cell salvage allows use of autologous blood and clotting factors, reducing the need for cross-matched blood and the associated risks of transfusion.

Notably, reducing blood loss into the surgical field allows for improved visualisation of the anatomy and performance of surgical instruments used to cauterise bleeding, thus further improving haemorrhage control.

**Conclusion** In conclusion, minimising blood loss during surgery requires input from the multidisciplinary team. Preoperative assessments should be held in a timely fashion to implement strategies for patient optimisation. Careful consideration and planning should be given to the intraoperative stage. Application of the strategies mentioned in this review will reduce the risk of significant intraoperative haemorrhage, aiming to improve the morbidity and mortality associated with complex pelvic surgery.

**Introduction/Background** Endometrial Cancer is the most common gynecological cancer in developed countries. Hysterectomy is the main treatment and minimally invasive surgery is the preferred approach. Pelvic and paraaortic lymphadenectomy should be considered according to the histological type, grade and stage.

**Methodology** We describe a case of a 48-year old woman with endometrial cancer where an external iliac vein injury occurred during the pelvic lymphadenectomy.

**Result(s)** We successfully managed this injury with intracorporal suturing using bulldog clamps and polypropylene sutures.

**Conclusion** The management of a vascular injury during laparoscopy depends on its severity, location. In our case, external iliac vein injury occurred during the pelvic lymphadenectomy, which was managed effectively and safely.

**Introduction/Background** Pelvic exenteration for recurrent and persistent gynecological malignancies is traditionally performed with open approach (OA). Nevertheless, reports on the use of minimally-invasive surgical (MIS) approach to pelvic exenteration have been published with promising results in terms of peri-operative morbidity. However, oncological safety of this approach has been poorly investigated. The aim of the present study was to assess the disease-free survival (DFS) and overall survival (OS) of patients undergoing minimally-invasive pelvic exenteration.

**Methodology** All patients undergoing pelvic exenteration for gynecological cancers between 2010 and 2021 were included and divided into minimally invasive and open pelvic exenterations. Only patients who underwent OA with maximum tumor diameter ≤50 mm were included in order to balance characteristics of the two groups. Survival analysis was performed according to Kaplan Meier methods and log-rank test; multivariate analysis was performed with Cox regression.

**Result(s)** Eighty-three patients were included. 35 (42.2%) were in the MIS and 48 (57.8%) in the OA group. 21 (60.0%) and 14 (40.0%) MIS were laparoscopic and robotic, respectively. Characteristics of the two groups are reported in table 1. Patients undergoing OA experienced a higher rate of 30-day post-operative complications ≥grade 3 (table 2). With a median follow up of 12 months (range, 1-97), the median DFS was 11 months (95%CI 8.8-13.2) versus 13 months.