Hospital, eastern Madagascar from September 2017 to August 2018.

Results We collected 24 cases of cervical cancer, which represented 25.26% of the cancers recorded. The average age at diagnosis was 49.23 years. Squamous cell carcinoma represented 96% of the histological type. The diagnostic time was 2 years on average; The disease is diagnosed in the advanced stage in 87.49% of cases. Risk factors are represented by the precocity of sexual intercourse at 53.17%, by the relationship of multiple sexual partners in 62.50%, the history of non-specific sexually transmitted infection was found in 45.83% and multiparity predominated at 59%.

Conclusion Compared to hospital data from other cancer centers, cervical cancer seen in the Oncology Department of Toamasina has the same epidemiological and clinical characteristics as those in other provinces. This disease is ranked second among registered cancers, but is the first gynaecological cancer.

IGCS20_1316

299 INCREASING INCIDENCE OF SEX CORD-STROMAL TUMORS IN THE UNITED STATES

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10.1136/ijgc-2020-IGCS.258

Introduction The incidence of ovarian cancer has decreased in the United States since the 1980s, due to decreasing incidence of epithelial ovarian cancers. The purpose of this study was to analyze trends in incidence of non-epithelial ovarian cancers.

Methods Data were obtained from the United States Cancer Statistics (USCS) database from 2001 to 2016. Age-adjusted incidence per 100,000 women and annual percent change (APC) in incidence were calculated using SEER*Stat and Joinpoint Software.

Results 18,346 women were diagnosed with non-epithelial ovarian tumors. 6,720 had sex cord-stromal tumors (SCST), of which 82.3% were granulosa cell tumors and 9.7% were Sertoli-Leydig cell tumors. 10,035 were germ cell tumors. The age-adjusted incidence rate was 0.28 for SCST, 0.24 for granulosa cell tumors, and 0.41 for germ cell tumors. Blacks had the highest incidence of SCST (0.61). Over a sixteen-year period, the overall incidence of SCST increased 1.70% annually (95% CI 1.13, 2.28; $p < 0.001$), and the incidence of granulosa cell tumors increased 2.24% annually (95% CI 1.60, 2.88; $p < 0.001$). The incidence of mixed germ cell tumors also increased 3.4% annually (95% CI 1.89, 4.86; $p < 0.001$). However, the incidences of Sertoli-Leydig cell tumors and other subtypes of germ cell tumors were unchanged in the same time period.

Conclusions The incidence of sex cord-stromal tumors is increasing in the United States. Given prior studies suggesting risk is minimally affected by reproductive or lifestyle factors, further research is needed to elucidate mechanisms underlying this trend.

IGCS20_1320

302 OPPORTUNISTIC ASSESSMENT OF BONE MINERAL DENSITY ON COMPUTED TOMOGRAPHY IN THE GYNAECOLOGICAL ONCOLOGY SETTING

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10.1136/ijgc-2020-IGCS.259

Introduction Women with gynaecological cancers are at increased risk of cancer treatment-induced bone loss (CTIBL). Assessment of bone mineral density (BMD) is recommended internationally prior to commencement of any therapy associated with CTIBL. However, access to DXA is variable. This study explores the utility of assessment of BMD on CTs performed for cancer staging in the gynaecologic oncology setting.

Methods Prospective, cross-sectional, validation study comparing quantitative BMD assessment on CT (performed at 120kV) to the gold standard, DXA. CT assessment was performed using simple region of interest placement on lumbar vertebral trabecular bone and recording of resultant Hounsfield units (HU). Forty-eight women were included in this study.

Results CT BMD measurement showed significant correlation with DXA diagnostic categories and BMD. AUC for differentiation of normal from abnormally low BMD on CT ranged from 0.75–0.81. Threshold analysis (Youden's J-statistic) identified the optimal threshold for differentiation of normal from abnormal BMD as 148HU at L3 (sensitivity 82.4%, specificity 83.9%).

Conclusion Assessment of BMD on CT at diagnosis of a gynaecological cancer is simple, differentiates normal from abnormally low BMD with a high degree of accuracy, and requires a negligible increase in reporting time. For this high-risk cohort, it can facilitate early identification of patients with low BMD and optimisation of their bone health prior to deleterious effects of therapy. It can improve prioritisation of DXA referrals and commencement of either therapeutic or prophylactic bone modifying agents as clinically appropriate.

The sensitivity and specificity of thresholds should be considered in determining the appropriate threshold for the chosen clinical application.

IGCS20_1322

303 INTRAVENOUS LEIOMYOMATOSIS

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10.1136/ijgc-2020-IGCS.260

Introduction The morphology of intravenous leiomyomatosis is similar to uterus leiomyoma, however, it often exhibits clinical features of malignant tumor: invasive growth, lung and peritoneal metastasis, tumor thrombi in the lumen of veins. The

aim of our study was to evaluate the features of the clinical course and to develop the surgical treatment tactic.

Materials The study involved 43 patients with intravenous leiomyomatosis, who underwent treatment in our clinic in 2010–2019.

Results Intravenous leiomyomatosis predominantly developed in reproductive and pre-menopause periods. Most patients (75,6%) had history of uterus leiomyoma. The group with non-intracardiac leiomyomatosis included 25 patients, with intracardiac – 18.

In the group of intracardiac intravenous leiomyomatosis the tip of the thrombus extended to the right atrium in 8 patients, to ventricle – in 8 patients, to pulmonary arteries – in 2 patients. In 6 patients the tumor thrombus extended from pelvis through internal iliac veins, in 6 – through ovarian veins, in 6 – through ovarian veins and internal iliac veins. The extent of surgery was hysterectomy with bilateral salpingo-oophorectomy, complete cytoreduction and thrombectomy. The surgery was performed in 10 patients by sternolaparotomic access, in 8 – by laparotomic. Two patients underwent surgery without cardiopulmonary bypass. Among 16 patients operated with cardiopulmonary bypass, the parallel extracorporeal circulation was used in 5 cases. All procedures were performed in one-stage approach. All patients are alive with no evidence of disease.

Conclusion This study is important step forward to the understanding of clinical course and developing the surgical management standards of disease.

IGCS20_1323

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MINIMALLY INVASIVE VERSUS OPEN RADICAL HYSTERECTOMY FOR STAGE IB2 CERVICAL CARCINOMA; AN UPDATED SURVIVAL ANALYSIS OF THE NATIONAL CANCER DATABASE

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10.1136/ijgc-2020-IGCS.261

Introduction Evaluate outcomes of minimally invasive radical hysterectomy (MIRH) for patients with FIGO (2019) stage IB2 (tumor size ≥ 2 and < 4 cm) cervical carcinoma.

Methods Patients with pathological stage IB2 squamous, adenocarcinoma, adenosquamous carcinoma of the cervix, no history of another tumor, who underwent primary radical hysterectomy and lymphadenectomy with known mode of surgery, diagnosed between 2010–2015 with at least one month of follow-up were drawn from the National Cancer Database. Impact of MIRH (robotic-assisted or traditional laparoscopic) on overall survival (OS) was assessed with the log-rank test. A Cox model was constructed to control for confounders.

Results A total of 1304 patients were identified; 621(47.6%) had open, 134 (10.3%) laparoscopic and 549 (42.1%) robotic-assisted laparoscopic radical hysterectomy. Overall conversion rate was 3.5%. Open and MIRH groups were comparable in terms of age, presence of co-morbidities and

histology. Patients in both groups had a median of 18 lymph nodes removed ($p=0.83$). Patients who had MIRH had shorter hospital stay (median 1 vs 3 days, $p<0.001$). Unplanned re-admission rates were comparable between open and MIRH groups (3.6% vs 5.3%, $p=0.13$). Median follow-up was 39.1 months. Patients who underwent MIRH had worse OS compared to those who had an open approach, $p=0.006$; 4-year OS rates were 88.8% and 93.2% respectively. After controlling for patient age, race, insurance status, histology and presence of lymph-vascular invasion, MIRH was associated with worse survival (HR: 1.90, 95% CI: 1.24, 2.92).

Conclusions MIRH is associated with worse overall survival for patients with pathological stage IB2 cervical carcinoma.

IGCS20_1324

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SURGICAL COMPLEXITY AND INTRA-OPERATIVE FLUID MANAGEMENT INFLUENCE DURATION OF ICU CARE FOLLOWING CYTOREDUCTIVE SURGERY

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10.1136/ijgc-2020-IGCS.262

Introduction Increased routine radical cytoreductive surgery for advanced ovarian cancer has resulted in higher utilisation of intensive care settings for post-operative recovery. We aimed to identify peri-operative variables associated with extended ICU admission.

Methods A retrospective review of all patients admitted to the ICU following cytoreductive surgery for ovarian cancer in a tertiary referral centre from 2015–2019. Patients were categorised according to length of stay, < 48 hours and ≥ 48 hours. Peri-operative variables were compared using student's t-test or Fischer's exact test.

Results 56 patients were admitted to the ICU immediately post-operatively, 37 for < 48 h and 19 for ≥ 48 h (range 3–11 days). There were no differences between cohorts in terms of median age, BMI, Charleston co-morbidity index or whether the patient had received NACT. Intra-operative predictors of prolonged ITU stay included extended duration of surgery (313 v 242 mins, $p=0.020$), higher surgical complexity score (5.6 v 4.1, $p=0.016$), bowel resection (63.2% v 32.4%, $p=0.045$), extensive intra-operative fluid use (6071 v 3789 ml, $p=0.0002$), intra-operative blood transfusion (63.2 v 32.4%, $p=0.045$) and higher estimated blood loss (1594 v 835 ml, $p=0.013$). Post-operative variables associated with prolonged ITU admission included higher immediate post-operative lactate (2.31 v 1.56, $p=0.031$), lower post-operative albumin (23.5 v 28.5, $p=0.018$) or eGFR (74 v 83, $p=0.028$) and need for post-operative blood transfusion (89.5 v 40.54%, $p=0.005$).

Conclusions Utilising identified intra-operative risk factors to perform individualised risk assessments for prolonged ICU admission could be used to assist communication between surgeons and intensivists to improve planning of ICU resources.