cGy, (100.20±31.64) cGy, (232.16±63.06) cGy] than 2D plan (P<0.05).

Conclusions Image-guidance brachytherapy of cervical cancer is helpful to detect hidden uterine perforation. When uterine perforation occurs, 3D plan can basically meet the clinical needs and is significantly better than 2D plan.

EPV072/#413 | SUTURE GRANULOMA MIMICKING STAGE IB1 CERVICAL CANCER RECURRENCE ON VESICAL-UTERINE SPACE AFTER RADICAL TRACHELECTOMY

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Objectives Introduction: Suture granuloma is a rare benign tumor caused by suture material, which usually appears several months or years after surgery. It may look identical to tumor relapse or metastatic disease on CT, PET scans and MRI, requiring histopathologic confirmation. An electronic literature search was undertaken using Medline, PubMed and Cochrane library databases for cerclage suture granuloma cases, using terms 'cerclage', 'suture granuloma', 'cervical cancer' 'metastasis' and boolean operators AND or OR, without any findings.
Methods Presentation of case: 31 years-old with cervical cancer IB1 in 2014. She underwent radical trachelectomy, laparoscopic limphadenectomy and cerclage as fertility-sparing treatment. The patient attended for regular follow-up during 4 years, without signs of recurrence. 6 years after treatment, presented vaginal bleeding and fetid discharge. Physical examination: 1cm exophytic bleeding lesion on anterior cervical-vaginal recess. Two biopsies were realized without any concluding findings. Pelvic MRI evidenced a cystic lobulated formation with thick walls, vascularized septs presenting wide contact with vesical trigon measuring 2.2x1.5x2.4cm, and an enlarged lymphnode in internal iliac chain of 1.3cm. Considering the risk of malignancy, the patient was submitted to laparoscopic resection of the lesion and lymphnode dissection.
Results The final analysis resulted in granulation tissue with no signs of malignancy in lesion or in lymphnode, thus excluding the hypothesis of malignant recurrence or metastasis.
Conclusions Discussion: Foreign body granuloma may look identical to tumor relapse or metastatic disease on image exams, thus requiring histopathological confirmation. However, the hypothesis of granulomatous reactions involving cerclage non-absorbable suture must be a differential diagnosis in clinical practice.

EPV073/#423 | AN OVERVIEW OF CERVICAL CANCER EPIDEMIOLOGY AT THE ONCOLOGY GYNECOLOGY CENTER OF SANTA MARCELINA HOSPITAL- BRAZIL

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Objectives Evaluate clinical results of patients with cervical cancer, based on statistics from the Oncology Gynecology Center of Santa Marcelina Hospital in Sao Paulo, Brazil, between 2012 to 2018.
Methods Retrospective analysis of 370 patients' medical records, who were followed up. The data table included the following variables: age at diagnosis, symptoms, tobacco use, staging, treatments, fatal outcome, and histological type.
Results The median age of patients at diagnosis was 51 years. The major symptom was vaginal bleeding (53.65%). Presence of smoking was reported by 33% of the patients. The histological distribution showed predominance of epidermoid carcinoma (83.6%) over adenocarcinoma (13.8%). About the diagnosis, 4.2% of the patients were in stage IA1, followed by IA2 2.2%; IB1 8.4%; IB2 6.5%; IB3 1%; IIA1 1.16%; IIA2 2.7%; IIB 15.4%; IIIA 1.4%; IIIB 41.9%; IIIC1 1%; IIIC2 0.84; IVA 5.4% and IVB 8.9%. Only 20% of the patients underwent surgical treatment and the most frequent therapeutic option were radiotherapy and concomitant chemotherapy (80%). The relapse rate was 23,24%, mostly in the vagina, and about 40% of the patients had a fatal outcome in our review.
Conclusions Based on these data table, vaginal bleeding as the major symptom, the high rate of IIIB stage diagnosis, and of the fatal outcome, may be an indicative of late diagnosis of this population confirming reports from developing countries. As cervical cancer has a chance of cure if diagnosed at early stages, the results demonstrate the need for investments in educational initiatives to raise awareness among the public about the importance of cervical cancer screening.

EPV074/#427 | CERVICAL CANCER: MULTICENTRIC EPIDEMIOLOGICAL STUDY

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Objectives To determine the epidemiological profile of cervical cancer in Tunisia and to specify the cost of treating the disease in order to develop an effective prevention strategy.
Methods It is a retrospective descriptive, multicenter study conducted in 6 obstetrical gynecology departments over a four-year period from January 1, 2016 to December 31,2019.
Results The number of all-stage cervical cancer in the different centers was 655 cases over a four-year period; which is equivalent to 166 cases/year. The average age of our patients was 53.5 years. More than half of our population did not have health insurance, and 38% were illiterate. The average age of sexual activity was 22.2 years. Cervical smear screening was performed in only 35 patients (17.9% of cases). The average consultation time in the study population was 5.6 months. The most frequent reason for consultation was metrorrhagia in 63%. A clear predominance of squamous cell carcinoma (82%) was noted. Tumors were classified according to the FIGO 2009 classification: 23.5% were diagnosed at an early stage (<IB1) and 76.3% at advanced stages (IB2 up to IV).

Several therapeutic sequences were applied in our study series, the most frequent was surgery associated with radiotherapy and chemotherapy (60.1%). The direct annual cost of treatment was estimated at 1268502 DT (~ 465000 $). Radiotherapy represented the largest item of expenditure (37.4% of the cost of treatment).

Conclusions The control infectious origin's pathology necessarily involves the implementation of national screening program, but also public awareness campaigns and mass vaccination against HPV of young virgin girls.

EPV075/#455   **INTRAOPERATIVE LYMPH NODE FROZEN SECTION EXAMINATION (FSE) IN EARLY STAGE CERVICAL CANCER – A RISK STRATIFICATION ALGORITHM**

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Objectives To evaluate pre-operative radiology and histopathology findings in cervical cancer lymphadenopathy detection, allowing targeted FSE.

Methods A retrospective analysis was conducted of 203 early stage cervical cancer patients between 2010 and 2019 in a tertiary centre. All patients had histologically confirmed cervical cancer and underwent MRI prior to intraoperative FSE.

Results 19 patients were found to have lymph node metastases (LNM) (9.36%) at FSE. Patients were at increased risk of LNM by 6-fold with positive LVSI, 3-fold with MRI lymphadenopathy and 3.5-fold with MRI visible disease. The presence of lymphadenopathy on MRI and positive LVSI in combination increased the risk of LNM by 19-fold.

Abstract EPV075/#455 Table 1   Pre-operative risk stratification algorithm

Pre-operative risk stratification algorithm			
	Odds Ratio	95% CI	P value
LVSI positive	6.25	1.25-31.12	0.02
MRI lymphadenopathy	2.94	1.02-8.43	0.04
MRI visible disease	3.51	1.12-10.99	0.03
MRI lymphadenopathy and LVSI positive	19.00	3.45-104.51	0.0007

Conclusions We believe that intraoperative FSE has a role in the surgical management of early cervical cancer. However, we acknowledge that it is expensive and unpredictably time intensive, exposing patients to increased surgery duration and associated risk. We also recognise that it may not be feasible for all patients. By application of the preoperative risk stratification algorithm we demonstrate that FSE can be a useful tool to reduce surgical morbidity and avoid ineffective radical surgery or multimodal treatment in a cost effective manner in high-risk patients.

EPV076/#456   **BEAU BIDEN CANCER MOONSHOT PROGRESS REPORT ON ADVANCED CERVICAL CANCER: PILOT PROJECT ON DNA/RNA EXTRACTION FROM RECURRENT AND METASTATIC CARCINOMA SPECIMENS**

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Objectives Genomic and downstream signaling data informing tumor angiogenesis, DNA repair, and immunologic tolerance are required to develop targeted therapy against cervical cancer. The Cervical Cancer Genome Atlas (TCGA) is derived primarily from pre-invasive and early-stage disease, with under-representation of recurrent/metastatic specimens. NRG/GOG-0240 is the phase 3 randomized trial that demonstrated a survival benefit with anti-angiogenesis therapy. Patients enrolled on this study provided tumor samples for whole genome sequencing and whole exome sequencing (to be performed at the New York Genomic Center (NYGC)), as well as RNA-seq and microRNA-seq (University of North Carolina (UNC)), and bioinformatics modeling (Roswell Park Cancer Institute). To determine the feasibility of DNA/RNA extraction from these relatively small, formalin-fixed paraffin-embedded (FFPE) specimens, we conducted a pilot study.

Methods Following pathology review at the NRG Biospecimen Bank at Nationwide Children's Hospital, DNA/RNA were co-extracted using established protocols. All samples were required to contain at least 50% tumor content for somatic mutation detection.

Results Forty-four out of 107 FFPE samples (41%) underwent successful extraction. 36 were sent in the pilot study including 27 (75%) squamous-cell and 9 (25%) adenocarcinomas. Prior to transfer to NYGC, most samples were noted to have high genomic quality number with few having lower than 10,000 base pairs. Two were flagged for low quality secondary to degradation. One out of 36 samples sent to UNC did not provide sufficient RNA. Five samples were high risk for low DV200 (RNA fragment sizes < 200 base pairs).

Conclusions DNA/RNA extraction can be performed using recurrent/metastatic cervical cancer FFPE specimens.

EPV077/#472   **CLINICAL IMPLICATIONS OF COMPUTED TOMOGRAPHY-BASED, ARTIFICIAL INTELLIGENCE-DRIVEN SARCOPENIA AND BODY COMPOSITION CHANGE DURING PRIMARY TREATMENT IN EARLY CERVICAL CANCER**

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Objectives To investigate the impact of sarcopenia and body composition on survival outcomes in patients with early-stage cervical cancer.