beam radiotherapy if nodal status unknown and to consider vaginal brachytherapy if node negative. S) For high risk to consider EBRT vs vaginal brachytherapy.

**Methods** All stage I endometrial cancer patients registered to our institution from June 2015 to March 2018 were selected from database. Electronic record of case notes, histology, blood results, imaging results and multi-disciplinary team meeting outcomes were retrospectively reviewed.

**Results** A total of 120 patients, age 32–88 years (median age 65 years). 113 patients underwent surgery (87 had TH + BSO and 26 had TH+BSO+lymphadenectomy). 7 patients were not fit for surgery and treated with hormone. Post op histology showed 76 patients G1, 20 patients G2 and 17 patients G3. 111 patients had FIGO IA and 2 patients had IB. 26 patients were given adjuvant radiotherapy (3 EBRT and 23 Brachytherapy).

**Conclusions** Rate of adherence with BGCS guidelines for surgery and adjuvant radiotherapy were 90% and 88.5% respectively. Some grade changes between pre and post-op histology, findings in clinical examination and imaging were attributed to the main management reason to treat outside BGCS guidelines. Recurrent rate was 2.5%.

**IGCS19-0724**

**427 OVEREXPRESSION OF MEL-18 ENHANCES PROLIFERATION, MIGRATION AND POSITIVELY REGULATES CELL CYCLE IN ENDOMETRIAL CANCER VIA PI3K/AKT/mTOR PATHWAY**

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**Objectives** To detect the expression of Melanoma protein 18 (Mel-18) in endometrial carcinoma (EC) and evaluate the biological effects of Mel-18 on the proliferation, immigration and cell cycle of EC cells.

**Methods** Immunohistochemistry (IHC), Western blotting and RT-qPCR assays were used to examine the expression of Mel-18 in EC. Adenovirus and siRNA were used to regulate Mel-18 gene levels in cells. The MTT dye solution and colony formation assay were used to detect the cell proliferation activity. Transwell migration Assay was used to detect the cell immigration ability. The cell cycle was detected by flow cytometry. Western blotting was used to detect the related proteins expression in PI3K/AKT/mTOR pathway.

**Results** Mel-18 mRNA and protein were both highly expressed in EC (P < 0.05). The Mel-18 mRNA and protein expression were both significantly increased by transduced with adenovirus encoding Mel-18 cDNA (P < 0.05). Meanwhile, The Mel-18 protein and mRNA levels were significantly reduced by transfected with siRNA-Mel-18 (P < 0.05). Up-regulation of Mel-18 was significantly promoted the cell viability, clonality and migration capacity (P < 0.05). The percentage of cells at S + G2/M phase was significantly increased in Mel-18-over-expressing cells (P < 0.05). We also explored the potential mechanism of Mel-18 in EC cell lines. Overexpression of Mel-18 activated the PI3K/AKT/mTOR pathway, the expression of PI3K p85α, p-AKT, p-mTOR, c-myc, cyclin D1 and bcl-2 proteins were significantly increased, but bax protein was decreased.

**Conclusions** Mel-18 was highly expressed in EC and promoted cell proliferation, migration and positively regulated cell cycle progression via PI3K/AKT/mTOR pathway.

**IGCS19-0121**

**428 UTERINE SMOOTH MUSCLE TUMORS OF UNCERTAIN MALIGNANT POTENTIAL (STUMP): ULTRASOUND CHARACTERISTICS**

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**Objectives** Uterine smooth muscle tumors of uncertain malignant potential (STUMP) represent a group of rare and challenging myometrial neoplasms. STUMPs that are followed by a recurrence are biologically low-grade leiomyosarcomas, but using current methods of analysis, this diagnosis cannot be made with certainty until a recurrence has developed. Our objective is to describe ultrasound findings in women with STUMP.

**Methods** We retrospectively evaluated preoperative sonographic data of patients with histopathological STUMP diagnosis between 2014 and 2018 in Turin S. Anna Hospital, a tertiary center. The tumors were characterized on the basis of ultrasound images and ultrasound reports using the terms and definitions of the Morphological Uterus Sonographic Assesment (MUSA) group.

**Results** Thirteen patients with STUMP (19 lesions, of which 17 pure STUMP and 2 STUMP with LMS associated) were identified. Using the MUSA terms and definitions most STUMP were poorly or moderately vascularized (69%) and almost all had both circumferential and intra-lesional flows (82%). Only three (16%) STUMP showed shadowing. Outline were well-defined in sixteen cases (84%). All STUMP had non-uniform echogenicity. Eleven (58%) STUMP were isoechoic, two (11%) hyperechoic and six (31%) had mixed echogenicity. Thirteen (68%) STUMP had microcystic anechoic areas. Over 30% of patients had multiple stumps and almost 80% associated myommas.

**Conclusions** The suspicion of STUMP is supported by the ultrasound finding of a single or multiple lesion, isoechoic or with mixed echogenicity, without shadowing, with regular borders, internal microcystic anechoic areas and vascularization from minimal to high both circumferential and intralesional.

**Vulvar and Vaginal Cancer**

**IGCS19-0408**

**429 VAGINAL CANCER WITH UTERINE PROLAPSE: A RARE ENTITY**

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Abstracts

Objectives Primary vaginal cancer is a rare condition, constituting 1–2% of all gynecologic malignancies. It usually occurs in patients over 60 years of age. Primary vaginal cancer combined with uterine prolapse is very rare.

Methods We present 3 cases of primary vaginal cancer in women with uterine prolapse treated in Salah Azaiez institute between 1997 and 2017.

Results The mean age was 74.6 years, the mean parity was 6.7 parity per woman. Symptoms were blood stained discharge, foul odor leukorrhea, and severe pelvic pain for the last 1 to 3 months. The mean tumor size was 6.3 cm and the tumor location was on the anterior wall in 2 cases and the posterior wall in one case. The prolapse was reduced under intravenous sedation in operating room. On gynecologic examination, uterus was normal in size, no adnexal mass was examined, one patient presented with vesico-vaginal fistula. Biopsy of the ulcer at vaginal wall revealed invasive squamous cell carcinoma of vagina. The extension work up didn’t reveal any metastasis in none of patients. The tumor was staged at stage I of FIGO in 2 patients and at stage IVA of FIGO in one patient. All the patients underwent surgery, and one patient had adjuvant radiotherapy. The mean follow up was 37.3 months and the patients were free of disease during follow up period.

Conclusions Uterine prolapse combined with vaginal cancer is a very uncommon condition. Our series seems to be important due to number of cases reported and the successful treatment management.

IGCS19-0411

1R Chargui, 1Raked.

BRACHYTHERAPY AND SQUAMOUS CELL CARCINOMA OF VAGINA: ONE SINGLE INSTITUTE EXPERIENCE

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Objectives Primary vaginal carcinoma is an uncommon malignancy. Brachytherapy (BT) places a central role in the overall treatment course. We sought to describe the utilization rate of BT and evaluate the potential survival benefit of BT over radiotherapy alone (RT) in primary squamous cell carcinoma of vagina (PSSCV).

Methods A retrospective analysis of Salah Azaiz Institute data base was performed analyzing women with PSSCV treated with external beam radiation (EXBR) alone and with the combination of EXBR and BT and diagnosed between 1994 and 2015.

Results Of the 76 PSSCV patients, 43 met inclusion criteria. The mean age was 60 years. EXBR alone was performed in 62.8% of patients, whereas the combination of EXBR and BT was performed in 37.2%. Median follow-up was 33.4 months. Kaplan-Meier estimated that 5-year disease free survival (DFS) and overall survival (OS) was 71.9% and 72%, respectively. We found that patients who underwent the combination of EXBR and BT had better OS (81.2% Vs 29.6%) than EXBR alone (P=0.00063), but the DFS was better on patients who underwent EXBR alone than who underwent a combination of EXBR and BT the and (80% Vs 66.6%), this results wasn’t statically significant (p=0.505). Factors associated with best OS include size < 4 cm, tumor site on one wall of the vagina, histological grade 1, RT dose >60 Gy, the absence of tumor recurrence. Only exophytic growth was correlated with best DFS.

Conclusions The combination of EXBR and BT seems to be the best model of radiotherapy for PSSCV.

IGCS19-0416

SURGICAL MANAGEMENT OF METASTASIS OF PRIMARY VAGINAL CARCINOMA: ONE SINGLE INSTITUTE EXPERIENCE

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Objectives Because primary carcinoma of the vagina comprises less than 2% of all gynecologic malignancies, the management of metastasis is not well known.

Methods We reported the surgical management of metastasis of primary vaginal in 2 patients treated in Salah Azaiz institute on 1994 and 2006.

Results The first patient was 37 years old and had a primary neuroendocrine tumor of vagina and the second patient was 68 years old and had a primary adenocarcinoma of vagina. The first patient was staged as stage I of FIGO and the second as stage IV of FIGO. The two patients underwent surgery as primary treatment followed by chemoradiotherapy. And they were free of disease. Fourteen years later, the first patient developed a lung metastasis managed with surgery and oncologic results were successful (lived for 3 years after). The second patient developed a brain metastasis managed with surgery and followed by prophylactic radiotherapy; the patient was free of disease during her follow up period (2 years).

Conclusions We reported a successful surgical management of metastasis of primary vaginal carcinoma in two patients; our findings seem to be interesting due the lack of data about the management of those metastasis.

IGCS19-0420

THE MANAGEMENT OF PRIMARY ADENOCARCINOMA OF VAGINA: ONE SINGLE INSTITUTE EXPERIENCE

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Objectives Primary adenocarcinoma of vagina (PAV) accounts less than 15% of Primary carcinoma of the vagina (PCV). The objective of this study was to report the treatment management of PAV and to identify the prognosis factors affecting the overall survival (OS) and the disease free survival (DFS).