

independent factors associated with an improvement in the physical domain of WHOQOL-bref.

Conclusions Women who used a vaginal dilator showed improvement in the physical domain of QOL after 12 months of intervention.

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21 PREVALENCE OF BRCA1/2 MUTATION AND ALTERATIONS OF HOMOLOGOUS RECOMBINATION DEFICIENCY (HRD) IN UTERINE LEIOMYOSARCOMA: A RETROSPECTIVE, MONOCENTRIC STUDY

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Objectives Uterine leiomyosarcoma (uLMS) is a rare, very aggressive malignancy; molecular characterization is still uncertain, thus limiting the development of novel target based treatments.

This study aims at analyzing i) the prevalence rate of BRCA1/2 mutation and HRD alterations in ULMS, and ii) the association of BRCA1/2 and HRD abnormalities with clinical features.

Methods We planned to carry out a retrospective study on formalin-fixed paraffin-embedded (FFPE) samples of uLMS collected at the Fondazione Policlinico Universitario A. Gemelli, Rome. DNA extraction will be carried out using an automated device (MagCore HF16 Plus, Diatech Lab Line, Jesi, Italy). The mini Homologous Recombination Solution (mini HRS by SOPHiA GENETICS) is a capture-based target enrichment kit and full access to the SOPHiA DDM platform, able to identify mutations within BRCA1, BRCA2, TP53 and RAD51C genes on FFPE-deriving DNA.

Results The Next-Generation Sequencing (NGS) data were evaluable in 81 out of 92 FFPE deriving DNA samples. The mean coverage of each sample was 2000x, while the minimum acceptable for variant calling at 5% of MAF was 500x. The following pathogenic variants were identified: 21 patients with p53 mutation, all truncating or frameshift; 2 patients carriers of indel in Brca2; 3 patients with Brca1 truncating variants; 1 patient with both brca1 and brca2 mutations. Two novel p53 truncating variants have been identified. The evaluation of possible germline origin is now under evaluation for overall carrier patients alive.

Conclusions Final results could open novel perspectives terms of disease pathogenesis, and potential use of target based drugs (e.g. PARP inhibitors).

Plenary 4: Presidential Plenary

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22 OPEN VS. MINIMALLY INVASIVE RADICAL TRACHELECTOMY IN EARLY STAGE CERVICAL CANCER: INTERNATIONAL MULTICENTER IRTA STUDY RESULTS

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Objectives To compare disease-free survival (DFS) between patients who underwent open (ORT) versus minimally invasive (MIS) radical trachelectomy (RT) [laparoscopic (LRT) or robotic (RRT)].

Methods

Eligibility criteria included 1) RT and pelvic lymphadenectomy with/without sentinel lymph node mapping, 2) 1/2005 to 12/2017 3) squamous, adenocarcinoma, or adenosquamous histology, 4) stage IA2-IB1, 5) tumors ≤2 cm, 6) 15 or more cases per center.

Results A total of 698 patients [open (n=388) vs. MIS (310)] were included. The median follow-up time was 40.9 months (range, 1–179.1) [MIS 38.6 (range, <1–128.1) vs. open 68.3 (range, <1–200.8) (p<0.001)]. MIS patients had smaller tumors (no visible lesion: 76.8% vs 57.0%, < 1 cm: 1.9% vs. 2.8%, 1–2 cm: 21.3% vs. 40.2%, p<0.001) and lower rates of residual disease (42.9% vs. 56.2% p<0.001). (table 1) There were no differences in rates of parametrial involvement (2.1% vs. 1.3% p=0.055), vaginal involvement (0.8% vs. 1.4% p=0.198),