

grade 2 was observed in 7 patients, for abdominal pain and nausea. C- reactive protein was elevated in all patients, renal and hepatic functions were not impaired in any patients. Of the 15 patients, 9 patients had partial response, 4 had stable disease & 2 had complete response. The global physical score deteriorated slightly after 1st PIPAC (from 84% to 71%), but improved after PIPAC # 2 (up to 88%). Gastrointestinal symptoms & pain score remained stable under PIPAC therapy.

Conclusions Our results show the feasibility and safety of PIPAC for patients with advanced ovarian cancer. The procedure has low morbidity with no mortality & short learning curve. There was no therapy related deterioration of quality of life after PIPAC.

IGCS19-0163

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WEIGHT PERCEPTION AND SOCIODEMOGRAPHIC CHARACTERISTICS FOLLOWING ENDOMETRIAL CANCER TREATMENT

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10.1136/ijgc-2019-IGCS.57

Objectives To explore the association between self-reported 'unhappiness with weight' and sociodemographic characteristics and weight control behaviors among women who underwent hysterectomy for Stage I endometrial cancer.

Methods Women diagnosed with Stage I endometrial cancer who participated in the Laparoscopic Approach to Cancer of the Endometrium (LACE) trial were invited to complete a five-year follow up survey to evaluate their health status, lifestyle and behaviors including their weight perception and use of weight control methods. Of the 516 eligible patients, 259 (50.2%) agreed to participate in the survey.

Results At follow-up, women who self-reported they were unhappy with their weight were significantly more likely to have an annual income >AUD 40,000 (ORadjusted 2.7; p=0.025). Women who were unhappy with their weight were more likely to be younger at follow-up compared to women who were happy with their weight (ORadjusted 0.94; p=0.003). Weight loss programs completed in the twelve months prior to completing the survey were strongly predictive of unhappiness with weight; including exercise (ORadjusted 6.3; p<0.001), reduced meal intake (OR 5.2; p<0.001) and reduced fats/sugar intake (OR 5.4; p<0.001). Ever-use of commercial programs and diets from dietary books were also associated with unhappiness with weight at follow-up (p≤0.03).

Conclusions Our study provides evidence that many women continue to be unhappy with weight many years after their endometrial cancer treatment. Supporting their self-directed efforts to lose weight may increase benefit of available

programs, and therefore women's satisfaction with current weight.

Europe Regional Plenary

IGCS19-0510

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SYNDECAN-1 INHIBITION REVERSES THE PRE-MALIGNANT PHENOTYPE OF ENDOMETRIOMA THROUGH TGF-BETA SIGNALLING: POTENTIAL IMPLICATIONS IN ENDOMETRIOSIS ASSOCIATED OVARIAN CANCER

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10.1136/ijgc-2019-IGCS.58

Objectives Transforming growth factor-beta (TGF-β) is abundantly expressed in peritoneal fluid and endometrioma of women with endometriosis. Similarly, transmembrane proteoglycans of the Syndecan family (SDC), act as co-receptors for growth signalling factors and are aberrantly expressed in endometriotic tissues. Here, we aim to investigate the regulation of SDC-1 upon induced activation with TGF-β *in vitro*, to better understand their interactions and involvement in the pathophysiology of endometriosis.

Methods Endometrioma biopsies (n=15) were obtained from women diagnosed with endometriosis and not received any hormonal treatment. Tissue biopsies were investigated for intra-patient heterogeneity using pre-validated panel of stem- and cancer- cell signalling genes. Simultaneously, patient-derived endometriotic stem/stromal cells (CD90⁺ CD73⁺ CD105⁺, SC⁺) were allowed to generate 3D-spheroids in absence or presence of rhTGF-β or TGFBR1/II inhibitor Ly2109761 *in vitro*; assessed for its influence on SDC-1 expression, proliferation and invasive behaviour. Further, transcriptomic signatures after 3D-spheroid invasion was evaluated upon combining SDC-1 gene silencing with rhTGF-β treatment.

Results Clustering analysis from endometriotic tissue gene expression revealed in 2/15 samples (referred to as Endo-hi) aberrant expression of molecules of TGF-β signalling (TGF-β1, ESR1, CTNNA1, SNAI1, BMI1) which grouped separately from low expression samples (Endo-lo) by >95% CI. 3D-spheroids from Endo-hi SC⁺ exposed to rhTGF-β treatment showed increased SDC-1 expression and higher 3D-spheroid invasion compared to Endo-lo SC⁺. However, rhTGFβ treatment following SDC-1 gene silencing reversed the higher 3D-invasion potential and exhibited downregulation of cancer associated pathways.

Conclusions Modulation of SDC-1 reverses the pre-malignant phenotype of endometrioma and may reduce the potential risk for endometriosis associated ovarian cancer.