metastasis in primary low-grade ovarian cancer. Further prospective trials evaluating LVI and Ki-67 as a predictor of lymph-node metastasis should be planned.

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COMPARISON OF DIFFERENT METHODS TO DETERMINE MYOMETRICAL INVASION IN ENDOMETRIAL CANCER – A NATIONWIDE SWEECG STUDY

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Background Deep myometrial invasion (MI) (≥50%) is a prognostic factor for lymph node metastases and poorer survival in endometrial cancer. There is no consensus regarding which pre/peroperative diagnostic method should be preferred.

Aim To explore the pattern of different diagnostic methods for MI assessment in Sweden and to evaluate differences between MRI, vaginal ultrasound, frozen section and gross examination in clinical practice.

Methods Women with endometrial cancer registered in the Swedish Quality Registry for Gynecologic Cancer (SQRGC) between January 2010 and December 2019 were eligible. Inclusion criteria were FIGO stage I-III and available information on histology and on assessment of MI. Data on age, histology, FIGO stage, degree of MI, histology results, method for MI assessment and hospital level were collected from the SQRGC. The final assessment by the pathologist on specimens from hysterectomy was golden standard.

Results The study population included 1,950 women, 33% (n=649) had a MI ≥50%. The methods used for MI assessment were vaginal ultrasound in 54%, MRI in 22%, gross examination in 13% and frozen section in 11% of cases. Age, histology or FIGO stadium did not differ between the methods. The sensitivity, specificity and accuracy of vaginal ultrasound was 61.2%, 83.3% and 0.75% respectively, and for MRI 74.2%, 72.7% and 0.73%. The highest accuracy was for frozen section; 95.0%.

Conclusion The assessment of deep myometrial invasion in endometrial cancer is most often performed with vaginal ultrasound in Sweden. The sensitivity of this method is lower in clinical practice than for MRI and perioperative methods.

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DELAIS IN TREATMENT IN GYNAECOLOGY ONCOLOGY PATIENTS IN QATAR SEEKING MANAGEMENT OVERSEAS

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Introduction The gynecological oncology service in Doha treats all women living in or visiting Qatar. Despite the quality and affordability of the service many women travel overseas for their treatment following diagnosis or present following previous treatment overseas requesting further management. Although they must perceive potential advantages which encourage them to do so, there are difficulties which could arise including delay in treatment of a malignancy that could affect their outcomes. We wished to understand the impact of travel overseas on the waiting time for treatment.

Methods All patients seen over a period of 3 yrs who had travelled overseas were identified. Records were reviewed to identify what impact the decision to travel abroad had made on the timing of their treatment. According to Qatari cancer treatment standards, treatment should be within 14 days of a decision made by MDT. We considered that a delay in treatment would reasonably be defined as an interval of >4 weeks.

Results 18% of patients (n=153/850) with a recorded care plan by the MDT sought medical treatment overseas between 4/2015 and 3/2018. Patients had 25 different nationalities; Qatari nationals represented the majority (40.5%). Patients travelled to 28 different destinations. Most travelled to the U. S.A(15.7%), Philippines(15%), the UK(10.5%) and Thailand (9.2%).

23.5% of patients had a delay in treatment; 9.2% had an unknown treatment timing plan. Most had delays of <6 weeks; 10% had significant delays of many weeks, months and even >1 year.

Conclusion The decision to travel overseas in our patients resulted in delays of treatment for roughly 1/4 of patients. In 10% these delays would be expected to have an adverse effect on outcomes.
evidence shows that MV release and its content are modified in cancer cells compared to normal counterpart. By this mean, cancer cells can condition tumor microenvironment allowing them to metastasize, survive when exposed to adverse conditions (i.e. chemotherapy) and evade immune surveillance. Simvastatin (Simv), a HMGCoA reductase inhibitor and beyond its primary property of reducing cholesterol synthesis, exerts a role in cellular signaling and protein trafficking by inhibiting the isoprenylation of small GTPases. Recently, our group has demonstrated that (Simv) reduces metastasis in HGSOc murine models and improve survival among statin users. Here, our aim was to study the effect of simvastatin in MV release from HGSOc cancer cells, the MV composition, its uptake, its intracellular trafficking in neighbor cancer cells and in the MVinduced migration and metastasis of these cells.

**Methods**

HeyA8-released MVs were isolated upon 24h exposition to Simv (5 mM) or MOCK (DMSO as vehicle) by using differential ultracentrifugation, characterized by transmission electron microscopy (TEM) and immunoblotting (Alix, HSP70, TSG101, and CD63), and quantify by nanoparticle tracking analysis (NTA). For the uptake assays, HeyA8 cells were treated with PKH67-labelled MVs (2,5h) and analyzed by flow cytometry. For MV content composition, proteins involved in adhesion and invasion (i.e. EMM-PRIN) were characterized by immunoblotting. The endocytic trafficking was assessed by measuring the colocalization of PKH67-labelled MVs with recycling endosome (Transferrin) and lysosome (Lysotracker) markers by fluorescence microscopy in recipient HeLa cells. For migration and invasion assays HeyA8 cells were incubated with Simv or MOCK-treated MVs for up to 48h.

**Results**

Simv did not modify MV profile and release from HeyA8 cells. However, Simv significantly reduced the EMM-PRIN content in MVs and increased its uptake in recipient cancer cells compared with MOCK conditions. Upon Simv exposure, a shift in intracellular trafficking towards recycling endosomes rather than to lysosomes was observed in these cells.More importantly, a significant reduction in migration and invasion induced by MVs in HeyA8 cancer cells was observed upon Simv exposure.

**Conclusion**

Herein, we demonstrated that MVs released by HGSOc cells exert an autocrine and paracrine effect that prompt migration and invasiveness of cancer cells. Among the mechanisms by which Simv inhibit cancer cell metastasis are the modification in MV content, its uptake and intracellular trafficking, all critical steps for determining their procarcinogenic effects. Our findings provide preliminary and novel evidence on the relevance of Simv in regulating cell-to-cell communication through MVs and further support for considering the use and maintenance of statins in HGSOc patients. (Research support by Fondecyt 1201083 and 1181907).