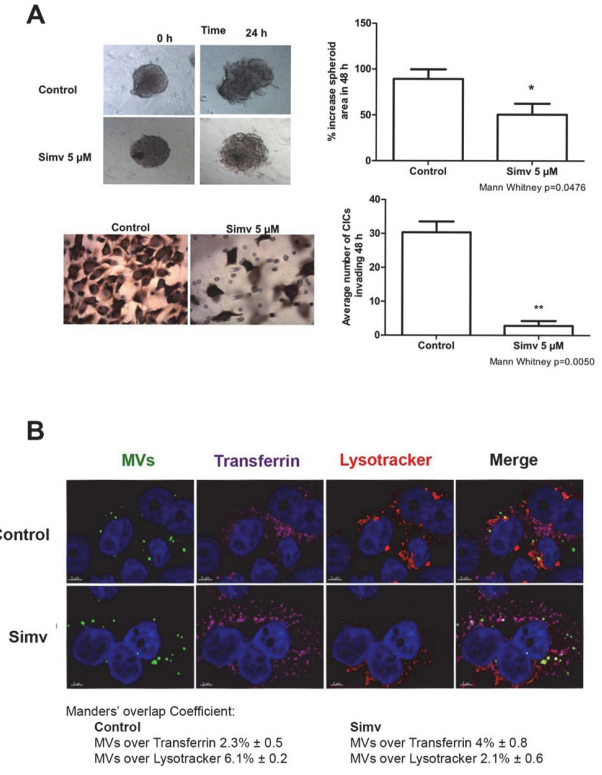
evidence shows that MV release and its content are modified in cancer cells compared to normal counterpart. By this mean, cancer cells can condition tumor microenvironment allowing them to metastasize, survive when exposed to adverse conditions (i.e. chemotherapy) and evade immune surveillance. Simvastatin (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 μM) 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. EMMPRIN) 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 EMMPRIN 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 pro-carcinogenic 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).



Abstract Figure 1

Surgical Films

Surgical Films

IGCS20_1164

466 LAPAROSCOPIC MANAGEMENT OF HUGE OVARIAN CYST; NOVEL TECHNIQUE

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This is a case of 35 years old patient who presented with a massive ovarian mass. She underwent fertility-preserving ovarian cystectomy. The technique describes how to manage such ovarian masses while maintaining cancer hygiene and limitation of spillage risks.

IGCS20_1435

467 VNOTES (VAGINAL NATURAL ORIFICES TRANSLUMINAL ENDOSCOPIC SURGERY) FOR IA1 CERVICAL CARCINOMA

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Introduction The treatment of cervical squamous cell carcinoma, FIGO stage Ia, with no lymphovascular invasion is total hysterectomy with salpingectomy with/without oophorectomy, when there is no intention for fertility-sparing. Lymphadenectomy is usually omitted in those cases. Recently, Ramirez et al evidenced that minimally invasive radical hysterectomy was associated with lower rates of disease-free survival and overall survival than open abdominal radical hysterectomy among women with early-stage cervical cancer. After that work, the uterine manipulator was pointed as an important cause for these results by some authors and many of them proposed

closing the vaginal cuff as the first step of the minimally invasive surgery. However, for patients with the Ia1 stage, there is no need for extensive vaginal margin. Moreover, performing laparoscopic hysterectomy without a uterine manipulator is challenging. In this context, vNOTES provides an easy solution.

Description We performed a cervical cerclage invaginating the external cervix orifice followed by conventional vNOTES hysterectomy with bilateral salpingectomy. The patient was positioned in stirrups in Trendelenburg position and standard sterilization was performed. After cervical cerclage, a circular incision was made around the uterine cervix and the following structures were sealed and divided by an advanced bipolar device: uterosacral ligaments, anterior bladder pillars, parametria. Then, a self-constructed vaginal port with alexis® and surgical glove was inserted through the vagina. Pneumoperitoneum was inflated and the sealing/division of uterine arteries, round ligaments, ovarian ligaments, and broad ligaments were completed.

Conclusion vNOTES may provide a safe minimally invasive hysterectomy for Ia1 cervical carcinoma.

IGCS20_1115

468 LATERALLY EXTENDED PARAMETRECTOMY (LEP)

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10.1136/ijgc-2020-IGCS.407

Introduction Laterally Extended Parametrectomy (LEP) was imagined by Ungar and Palfalvi as a more radical surgical procedure for the treatment of lymph node positive stage Ib and stage IIb cervical cancer.

Methods The aim of the technique is to remove the entire parametrial tissue containing lymphatic structures from the pelvic side wall.

Results LEP superposes to a type D Querleu-Morrow radical hysterectomy, extending the lateral limits of the dissection not only to the medial surface of hypogastric vessels, but to true borders of the pelvic side wall. Its rationale was to avoid the need of aggresive and deleterious postoperative radiotherapy for patients with positive pelvic lymph nodes or parametria in which the final histology suggested a complete removal of the potentially tumor containing lymphvessel and lymph node containing fibro-fatty tissue. LEP may be also taken into consideration during pelvic exenteration, when the tumor involves the soft structures of the pelvic side wall, for a more extensive pelvic side wall dissection.

During LEP, together with the visceral branches of hypogastric vessels, all the parietal branches are also divided (ilio-lumbal, obturator, gluteal superior and inferior and internal pudendal vessels) at the level where the vessels leave or enter into the pelvis. LEP can be performed on one or both pelvic sides, depending on parametrial invasion or presence positive lymph nodes uni- or bilaterally.

Conclusion LEP provides a good chance for survival without the toxicity of radiotherapy for pelvic lymph node positive stage Ib or IIb cervical cancer patients.

IGCS20_1321

469 LAPAROSCOPIC PRIMARY REPAIR OF DUODENAL PERFORATION AFTER LAPAROSCOPIC PARA-AORTIC LYMPHADENECTOMY

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10.1136/ijgc-2020-IGCS.408

Objective To present of laparoscopic primary repair of duodenal perforation after laparoscopic para-aortic lymphadenectomy for the patient with endometrial carcinoma.

Patients A 78-year-old woman with postmenopausal bleeding and thickened endometrium presented to our department. The histopathology of biopsied endometrium revealed grade 1 endometrioid adenocarcinoma. The MRI shows an about 5 cm sized tumor within the endometrial cavity suspicious myometrial invasion.

Interventions We perform the laparoscopic staging surgery. No intraoperative complications were recognized. However, on postoperative day 1, the color of intra-abdominal drainage change from serosanginous to dark green. We strongly suspected small bowel perforation and perform secondary laparoscopic surgery immediately. We scrutinized the small bowel and found the perforation site on duodenum. The perforation occurred at the horizontal part of duodenum ventrally vena cava. We carried out laparoscopic primary repair with 3–0 vicryl. Double layer closure was done by interrupted suture in first layer and Lambert suture for second layer. Then, we placed drainage into the duodenal repair site and traced the small bowel meticulously. We reviewed the video of primary surgery. We thought that the thermal injury was occurred by ultrasonic cutting and coagulating device during the lymphadenectomy in pre-caval area just below duodenum or mechanical micro-perforation is made during lifting the duodenum by dissecting forcep. After duodenal repair, endoscopically guided placement of nasogastric tube was performed. Gastrography did not show any leakage at the site of duodenal repair on postoperative day 3.

Conclusions Immediate laparoscopic primary repair of duodenal perforation after laparoscopic para-aortic lymphadenectomy is safe and feasible.

IGCS20_1469

470 LAPAROSCOPIC RESECTION OF BULKY PARA-AORTIC LYMPH NODE METASTASIS

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10.1136/ijgc-2020-IGCS.409

Objective To present of laparoscopic resection of bulky para-aortic lymph node metastasis discovered during laparoscopic restaging surgery for unexpected ovarian malignancy

Patients A 45-year-old woman with prior laparoscopic bilateral salpingo-oophorecetomy, presented to our department with unexpected ovarian malignancy which was resulted from the high grade serous carcinoma. Preoperative PET CT scan shows enlarged lymph node in aorto-caval area and no abnormal finding in peritoneal cavity and previous operative site.