clinical interventions would likely improve peri-operative outcomes. Aim of the study was to identify and quantify morbidity and mortality associated with VC surgeries. These data would be taken forward, after implementation of the care bundle, as baseline for comparison as to the efficacy of the intervention. Literatures and guidelines review will be undertaken to assist with the construction of the care bundle.

**Methodology** Patients who underwent curative surgery for VC from 2017–2018 at Belfast City Hospital were selected. Patients were followed up for 3 years postoperatively

**Results** 43 patients underwent major VC surgery. Data were available for 27 patients. Average age was 67.2 years. Mean body mass index 28.2 kg/m2. All patients had squamous cell carcinoma except one with melanoma. All were stage 1a–II. All patients received pre-operative prophylactic antibiotics. 37% received post-operative antibiotics for 3–15 days. All vulvar wounds were closed using 2.0 vicryland 3.0 monocryl except one patient had clips. Groin wounds were closed using clips in 50% of the cases. Sentinel lymph node was used in 25.9%. Regarding drains: 62.4% had drain which were removed within 7 days. Urinary catheter was removed within 7.3 days. Laxatives were used in 29.6% postoperatively. Mean hospital stay was 12.1 days. Rate of readmission 14.8%, wound dehiscence 11.1%, hematoma 3.7%, infected lymphocyte 11.1% and cellulitis 22.2%. VC recurrence was 11.1% and death within the follow-up period was 22.2%. None related to surgery.

**Conclusion** Major VC surgeries are associated with high morbidity. Variety of strategies employed by clinicians regarding antibiotic therapy, wound closure, drains, urinary catheter and laxatives. Evidence-based, team agreed selection of uniform interventions as ‘care bundle’ would potentially lead to standardization of care and improvement in morbidity. We will present summary of evidence pertaining to creation of such a bundle and present our initial prospective results following its implementation.

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**Abstract 2022-RA-1458-ESGO**

A COMPARISON OF METHODS TO MEASURE SURFACE AREA OF VULVAR TUMORS

Nour el Houda Mekkaoui. Gynécocomptée I, CHU Hassan II Fès, Fès, Morocco

**Introduction/Background** In this digital age, it is remarkable that the size of vulvar tumors is still measured with a ruler. Surface area can be estimated with an ellipse model ($\pi/4 \times \text{height} \times \text{width}$). These estimates have been used to assess the effectiveness of systemic treatments in reducing tumor size. Effects were considered relevant if tumor sizes decreased with >20%. However, measurement errors interfere with these results. The aim of this study is to compare the accuracy and precision of surface area measurements with rulers and digital tools, obtained from the field of wound treatment.

**Methodology** A silicone phantom of the vulva was created (Figure 1A), including four tumors with known surface area ($A_0$). Two small tumors had an ellipse shape, and two large tumors had a more complex shape. Surface area (A) was measured with a ruler using the ellipse model, the imitoMeasure app, the imitoMeasure app with standardized angle (orthogonal) and distance to tissue ($1.5$ cm), the eKare system, and a 3D scan processed in Meshlab. The software of eKare automatically delineated tumors, while the other methods used user-indicated boundaries. Each method was tested 24 times on both tumor shapes.

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**Abstract 2022-RA-1458-ESGO Figure 1**

Results Relative errors were computed as $(A-A_0)/A_0$ and are shown in Figure 1B. The eKare system was most accurate
SUCCESSFUL IMMUNOTHERAPY WITH HUMAN PAPILLOMAVIRUS-ASSOCIATED GENITAL HSIL – A CASE REPORT

1Damir Danoli, 1Luka Marceli, 1Lucija Šuljić, 1Ilija Aliv, 1Nica Mamić, 2Daniela Danoli, 3Simun Puljiz, 1Mario Puljiz. 1Department of Gynaecologic Oncology, University Hospital for Tumors, Sestre milosrdnice University Hospital Centre, Zagreb, Croatia; 2Ledikdent Dental Centre, Zagreb, Croatia; 3School of Medicine, University of Mostar, Mostar, Bosnia and Herzegovina

Introduction/Background Imiquimod is an immune response stimulator often used in the management of various clinical manifestations of human papillomavirus (HPV) infections. Surgical treatment of vaginal intraepithelial lesions is often difficult and not always feasible. According to literature therapy with 5% imiquimod seems to be a safe mode of treatment for high grade genital intraepithelial lesions (HSIL) in selected patients, especially for vaginal and vulvar HSIL. The aim of this report is to present 5% imiquimod therapy as an alternative to surgical procedures in patient with vaginal intraepithelial lesion.

Methodology 55-year-old postmenopausal woman was referred to our department with high-grade squamous intraepithelial lesion (HSIL) and HPV-related changes on her Pap test. Also, patient presented with lesion on left vaginal fornix which cytology result was consistent with SIL. The patient underwent conization, resulting in a pathological diagnosis of grade 2/3 cervical intraepithelial neoplasia (CIN). Also, excision of vaginal lesion in left fornix revealed vaginal intraepithelial neoplasia (VaIN) grade 2/3. Neoplastic changes involved resection margins on both specimens. Total abdominal hysterectomy with resection of vaginal fornices and bilateral salpingo-oophorectomy were performed. Histological examination revealed VaIN 3. One year after the surgery, a follow-up vaginal smear demonstrated VaIN 1. Therefore, biopsy was performed leading to a pathological diagnosis of VaIN 1/2. Treatment was initiated with topical imiquimod 5% cream, three times per week, for 8 weeks.

Results Follow-up vaginal smear and colposcopy findings after completion of therapy were all negative for intraepithelial lesion or malignancy. As of 4 years after the imiquimod treatment, there has been no signs of recurrence.

Conclusion Combined treatment modalities may hold the key to optimal treatment of genital HSILs and the treatment must always be individualised. However, there are currently no studies assessing efficacy of imiquimod topical treatment with traditional surgical modes of treatment.

ROLE OF PLASTIC SURGERY FOLLOWING RESECTION OF VULVAL TUMOURS: IS COLLABORATION THE KEY?

1Maneesh Singhal, 2Seema Singhal, 1Shashank Chauhan, 1,1Suraksh Das, 1Suvashis Dash, 1Shivangi Saha, 1Shruti Chandrasekar, 1Nandini Singh, 1Amit Mandal, 2Anuj Singh, 3Neena Malhotra, 3Neerja Bhatia. 1Plastic and Reconstructive Surgery, All India Institute of Medical Sciences, New Delhi, India; 2Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi, India

Introduction/Background Reconstruction of the vulva following extirpative surgeries is essential in restoring the form and functions of daily living. Complex defect reconstruction can be difficult and may necessitate collaboration between gynaecology and reconstructive surgeons. We present our experience in the reconstruction of vulval defects following tumour excision (benign and malignant) and in the management of post inguinal lymph node dissection (ILND) lymphorrhoea.

Methodology A prospective study was conducted between 2020–2022. All patients (N=8) requiring plastic surgical intervention were included. Five patients with vulval tumours underwent reconstruction. Three patients having ILND lymphorrhoea and other malignant vulval tumours were managed conservatively with low pressure negative wound therapy (NPWT).

Results The median age was 50.4 years (28–63 years), requiring a mean hospital stay of 13.6 days. Two cases of vulval squamous cell carcinoma underwent local V-Y advancement flap and a pedicled anterolateral thigh flap, respectively. One case of primary vulval lymphedema was managed with debulking and reconstruction of the labia majora and minora with vulval flaps. Two benign tumours of the vulva (fibromatosis) required W-plasty and V-Y advancement flap respectively. One patient had vaginal wall necrosis and partial flap dehiscence in the immediate post-operative period. No long-term delayed complications were observed in our patients at a mean follow-up of 3 months. The mean length of hospital stay for inguinal lymphorrhoea was not significantly higher than that for those undergoing reconstructive surgery.

Conclusion Reconstructive surgery improves pain, function, and early postoperative recovery. Application of NPWT is an effective modality for treating inguinal lymphorrhoea. Collaboration with the plastic surgery team is essential in achieving the same for the benefit of such patients.

HUMAN PAPILLOMAVIRUS-ASSOCIATED AND -INDEPENDENT VULVAR SQUAMOUS CELL CARCINOMAS: CLINICAL, PATHOLOGICAL AND PROGNOSTIC DISTINCT ENTITIES

1Núria Carreras-Diezg, 2Carolina Manzotti, 3Lorena Marimon, 2Ricardo López del Campo, 1Pedro Jares, 2Claudia Pumarola, 3Pere Fusté, 3Berta Díaz Feijoo, 1Alex Glickman, 1Núria Agustí, 1Iriemerss Marina, 1Adela Sacó, 1Marta del Pino, 1Aureli Torné, 1Natalia Rakislova. 1Gynaecologic Oncology Unit, Hospital Clinic de Barcelona, Barcelona, Spain; 2Pathology Department, IGGlobal, Barcelona, Spain; 3Pathology Department, Hospital Clínic de Barcelona, Barcelona, Spain