

showed that, in the worst predicted scenario (median LOS corresponding to 12 days), 1146 €/patient would be saved if ERAS protocols were applied.

Conclusion* Besides of achieving lower LOS and fewer readmission rates, implementation of an ERAS program in AOC surgery leads to valuable hospital savings. Therefore, ERAS should be the standard practice for AOC surgeries.

317 ROLE OF INTEGRINS IN THE METASTATIC SPREAD OF HIGH-GRADE SEROUS OVARIAN CANCER

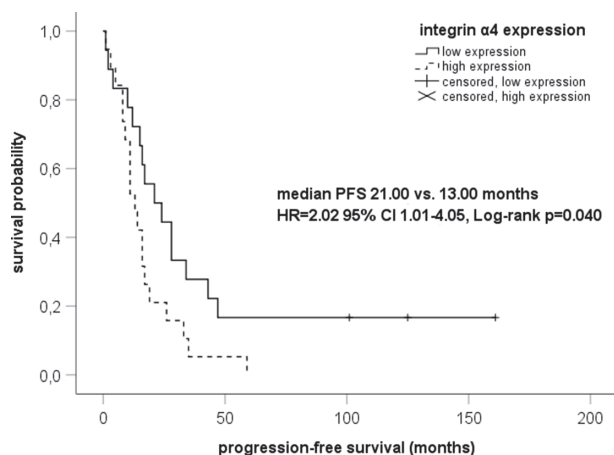
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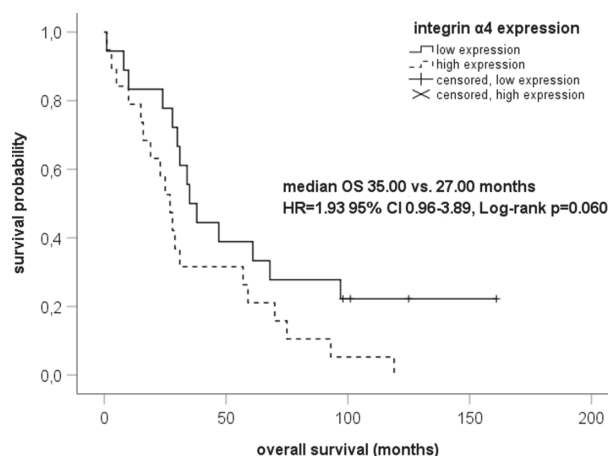
Introduction/Background* In high-grade serous ovarian cancer (HGSOC) an early intraperitoneal metastatic spread is common which determines the therapeutical approach and prognosis. Integrins may be involved in metastatic spread of HGSOC. In this study, integrin expression was examined in primary tumour and metastases of HGSOC.

Methodology The expression of integrin $\alpha 2$, $\alpha 4$, $\alpha 5$, $\alpha 6$, and $\beta 1$ was assessed by immunostaining in tumour samples of the ovary, omentum, and peritoneum of each patient. Differences in integrin expression among tumour localisations and their association with clinicopathological parameters were examined by Fisher's exact test. The impact of integrin expression on progression-free survival (PFS) and overall survival (OS) was examined by Cox regression and Kaplan-Meier analyses.

Result(s)* 113 tumour samples of 40 HGSOC patients were examined. The expression of the integrins did not differ between the three tumour localisations (all p-values >0.05) with the exception of the expression of integrin $\beta 1$ in primary tumour and omentum (77.5% versus 57.5%, p=0.014). Significant differences were also observed with respect to high expression of integrin $\alpha 4$ in primary tumour and omentum (52.5% versus 47.5%, p=0.008) and primary tumour and peritoneum (52.5% versus 47.5%, p=0.050). High expression of integrin $\alpha 4$ in peritoneum was associated with poorer PFS (HR=2.02 95% CI 1.01-4.05, p=0.047), younger age (p=0.047) and death (p=0.046). Median PFS in patients with



Abstract 317 Figure 1



Abstract 317 Figure 2

high expression of integrin $\alpha 4$ was 13.00 months whereas median PFS in patients without high expression of integrin $\alpha 4$ was 21.00 months (p=0.040). Expression of integrin $\alpha 2$, $\alpha 5$, $\alpha 6$, and $\beta 1$ did not correlate with PFS or OS.

Conclusion* Expression of integrin $\alpha 4$ may be altered during the metastatic spread of HGSOC and affect the prognosis. Expression of integrin $\alpha 2$, $\alpha 5$, $\alpha 6$, and $\beta 1$ did not reveal any prognostic value in HGSOC, even if expression of integrin $\beta 1$ differed between primary tumour and omental metastases.

327 ADVANCED OVARIAN CANCER SURVIVAL RATES IN A MEDITERRANEAN POPULATION: AN 8-YEAR REAL-WORLD NATIONAL ANALYSIS OF THE MALTESE ISLANDS

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Introduction/Background* Surgical management of advanced ovarian cancer (AOC) is considered technically challenging. In order to achieve the required outcomes a centre requires expertise and flow of cases. ESGO recommends that accredited centres perform at least 24 complete cytoreductive (CCR) surgeries per year, with a minimum of 12 complete primary debulking surgeries (PDS).

Malta is a small European island with a population of 520,000, seeing an average of 40 ovarian cancer cases per year, 20 of which are AOC. Being a small island, Malta faces a different reality and numerous challenges compared to other European countries.

Methodology This is a retrospective study, where all abnormal histology results suggestive of abnormal ovarian pathology during the time period of 2008-2016, processed by the Pathology Department in Mater Dei Hospital Malta were assessed. Furthermore, data was collected by reviewing the electronic medical records, histology results and imaging.

Result(s)* Over the 8 year period, 146 new patients were diagnosed with advanced ovarian cancer. The median age at diagnosis was 64.5 (33-91) years. 105/146 (71.9%) women presented with FIGO stage III and 41/146 (28.1%) with stage IV disease. Overall survival (OS) 32.87 months with a 1-year survival of 70.55% and 5-year survival of 20.28%. Treatment was offered to 128/146 (87.67%), 103 (80.47%) patients were offered

surgery, 72(69.9%) received PDS whilst 26(25.24%) had Interval debulking surgery(IDS). CCR was achieved in 10(9.5%) cases, whilst optimal and suboptimal cytoreduction was achieved in 95(90.5%) patients. OS in patients having surgery was 42.4 months, with a 1-year survival of 83.33% and 5-year survival of 27%. 26(20.31%) patients received chemotherapy only as a treatment option with an OS was 25.2 months, with a 1-year survival of 61.53% and 5-year survival of 7.69%. From the 16 patients who received best supportive care, 14/16(87.5%) died within 6 months following diagnosis. **Conclusion*** The amount CCR achieved during debulking surgery was noted to be low. In order to achieve better results, it may be appropriate that AOC treatment strategy is revised, by either moving towards IDS, which we have seen in the latter 3 years, or by investing in improving the surgical expertise. Despite low levels of CCR, survival rates are comparable with other European centres.

334 SARCOPENIA IN HIDING: CT-ASSESSED SARCOPENIA IS A PROGNOSTIC FACTOR IN OVARIAN CANCER

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Introduction/Background* Cancer cachexia represents a paraneoplastic syndrome including weight loss and sarcopenia. Sarcopenia is defined as a progressive loss of skeletal mass and function. Although poor nutritional status is adversely linked with oncological outcomes in ovarian cancer (OC), there is a paucity of data on the prevalence and prognostic value of sarcopenia in such patients. The aim of this study was to ascertain whether sarcopenia is associated with survival outcomes in OC.

Methodology MEDLINE, Scopus and Cochrane Database were searched for relevant references from inception until May 2021 in line with PRISMA guidelines. Observational studies (OSs) assessing the prevalence and prognostic impact of sarcopenia in OC were included. The methodologic index for non-randomized studies was used to evaluate the quality of the included studies. We pooled proportions to calculate the prevalence of sarcopenia, whilst dichotomous variables were assessed using hazard ratio (HR). Confidence intervals were set at 95%. Heterogeneity was assessed using Cochran's Q test, with an $I^2 > 50\%$ and p-value < 0.1 denoting significant inter-study heterogeneity. Statistical analysis was performed using the RevMan software version 5.3 and MedCalc. The level of statistical significance was set at p-value < 0.05 .

Result(s)* Eighteen OSs were included. The studies were of moderate quality and characterised by significant clinical heterogeneity. Pooled results rendered a summary proportion of 41.91% [(95% CI 34.97% - 49.01%); $I^2=93.2\%$] for the outcome of sarcopenia prevalence. Our analysis demonstrated no significant impact of sarcopenia on progression-free survival (PFS) either in univariate data [HR=1.11, (95% CI 0.90 - 1.37), p-value=0.33; $I^2=45\%$] or multivariate data synthesis [HR=1.23, (95% CI 0.94 - 1.60), p-value=0.13; $I^2=56\%$]. Conversely, sarcopenia was significantly associated with poorer overall survival (OS) in both univariate [HR=1.27 (95% CI 1.05 - 1.54), p-value=0.02; $I^2=72\%$] and multivariate data synthesis [HR=1.31 (95% CI 1.11 - 1.55), p-value=0.002; $I^2=78\%$].

Conclusion* Baseline sarcopenia is seemingly an independent prognosticator in OC. Early identification and enrolment in physical and nutritional optimisation may improve oncological outcomes. Future larger prospective studies are warranted to draw firmer conclusions.

337 UPFRONT CRS VERSUS NACT FOLLOWED BY CRS IN ADVANCED EOC IN INDIAN PATIENTS -AN ANALYTICAL RETROSPECTIVE STUDY

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Introduction/Background* Primary Cytoreductive surgery (CRS) followed by systemic chemotherapy is the standard management up to stage IIIB Epithelial ovarian cancer (EOC). The controversy starts with stage IIIC onwards ovarian cancer where differences in opinion has been noticed regarding initial approach towards these advanced cases. Incidence wise more than two third EOC patients present in advanced stages i.e., stage IIIC and beyond. As the standard treatment is primary cytoreductive surgery but it always challenges a surgeon to perform surgery in these locally advanced EOC. Therefore, the need for neoadjuvant chemotherapy (NACT) had been noticed in some selected cases. We share our outcomes as chemotherapy first or surgery first as the modality of treatment in advanced EOC.

Methodology A total of 200 patients of advanced epithelial ovarian cancer (EOC) were analyzed from 2012 to 2017 from a prospectively maintained ovarian cancer database. More than 90% patients were stage III and beyond. Overall survival was calculated in both the groups and cox multivariate analysis was performed for degree of cytoreduction and response to NACT.

Result(s)* Out of 200 included patients of advanced EOC—primary CRS was performed in 95 patients (47.5%) and Interval CRS after 3 to 6 cycles of NACT in 105 patients (52.5%). After median follow up of 35months, 5-year overall survival in upfront CRS group was 53.7% (CI= 0.405-0.651) and OS in NACT group was 42.2% (CI=0.318-0.522). Among upfront CRS group, optimal cytoreduction could be achieved in 66(72%) patients and in NACT group, optimal cytoreduction was achieved in 82(78%). In our tertiary care center, we offered HIPEC after CRS in both the groups where we could have achieved optimal cytoreduction.

Conclusion* Primary CRS is the standard treatment modality in advanced stages of EOC. However, in certain cohort of patient, we preferred NACT over upfront CRS. Identifying that group is challenging but feasible. Proper selection of patient is the ultimate key for reasonable outcomes.

350 IMPACT ON SURVIVAL OF SURGICAL THERAPEUTIC STRATEGY IN THE INITIAL MANAGEMENT OF ADVANCED OVARIAN CANCER

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