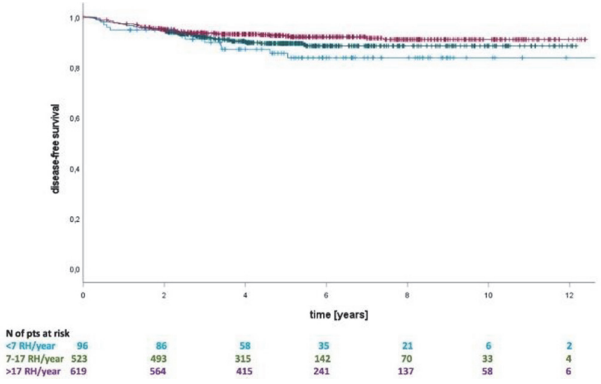
value which minimizes the p-value of the split in groups in terms of DFS. A Propensity Score Matching (PSM) was used to adjust the differences between the groups baseline characteristics.

Results 2,157 patients were initially included. The two most significant cut-offs for surgical volume were identified in 7 and 17 surgical procedures, dividing the entire cohort in low, middle, and high-volume centers. After PSM, 1,238 patients, distributed as 619 (50.0%) in high-volume, 523 (42.2%) in middle-volume and 96 (7.8%) in low-volume group, were analyzed. Patients operated in higher volume institutions had a progressively better 5-year DFS than those operated in lower volume centers (92.3% vs 88.9% vs 83.8%,p=0.029). No 5-year OS difference was noted (95.9% vs 97.2% vs 95.2%,p=0.70). Cox multivariate regression analysis for risk of showed that FIGO-stage >IB1, LVSI+, grade >1, tumor diameter >20 mm, minimally invasive approach, non-squamous cell histology, and lower volume centers represented independent risk factors for recurrence.



Abstract 2022-RA-1301-ESGO Figure 1

Conclusion Surgical volume represented an independent prognostic factor affecting DFS. Increasing number of RHs performed in each center every year was associated with improved DFS. Performance of at least 18 RHs per year may be considered the target volume of cases for referral centers associated with better DFS.

2022-RA-1302-ESGO ASSOCIATION OF SUVMAX WITH SURVIVAL AND KNOWN PROGNOSTIC FACTORS IN LOCO-REGIONALLY ADVANCED CERVIX CANCER

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Introduction/Background The Standardised Uptake Value (SUV) on FDG PET reflects glycolytic metabolism and high values have been shown to be associated with aggressive tumour biology and a poor prognosis in some but not all cancers. The purpose of this study was to evaluate the association of baseline SUVmax with tumour volume, lymph-node involvement and survival in loco-regionally advanced cervix cancer (LRACC) patients.

Methodology One hundred fifty-one LRACC patients, treated with curative intent between 1996 and 2014 were retrieved. Patients were classified to FIGO 2018 staging based on histopathology, MRI (for tumour volume and local compartmental spread) and PET (for measuring SUVmax and nodal spread). Association of SUVmax with known prognostic factors such as age, histology, FIGO stage, tumour volume and nodal spread was studied using relevant statistical tests and regression models. Cox proportional hazards model was used to evaluate predictors of relapse-free and overall survival.

Results SUVmax of the primary tumour was significantly higher (17.2 vs 13.8, p=0.012) in patients with positive nodes compared to those who were node negative. Similarly, SUVmax was 3.6 units higher in those with tumour volume above the median (34.3cc) compared to those with tumour volume below the median (p=0.007). There was no difference in the distribution of relapses and deaths by quartiles of SUVmax. There was no significant difference in FDG uptake by histology, p=0.2352. While node positivity and tumour volume were independent predictors of relapses, SUVmax was not. Tumour volume was an independent predictor of overall survival in LRACC.

Conclusion Prognosis in LRACC depends on the interplay between primary tumour (local control) and nodal disease (regional and distant relapse). SUVmax has limited independent prognostic value in LRACC. The primary role of FDG PET/CT remains detection of nodal and distant metastasis.

2022-RA-1332-ESGO TIMING AND DURATION OF DEFINITIVE RADIATION THERAPY WITH OR WITHOUT CONCURRENT CHEMOTHERAPY FOR FIGO 2018 STAGE IB3 – IVA CERVICAL CANCER IN A TERTIARY REFERRAL HOSPITAL IN THE PHILIPPINES

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Introduction/Background Cervical cancer remains to be a significant public health concern among low- to middle-income countries. The objective of this study was to determine the timing and treatment duration of definitive radiation therapy and the factors affecting its delivery to women with cervical cancer in a tertiary referral hospital in the Philippines.

Methodology This was a single center, retrospective study performed among 107 women with newly-diagnosed, biopsy-proven bulky or locally-advanced cervical cancer (FIGO 2018 stage IB3 – IVA) seen from January 1 to December 31, 2019 and received radiation therapy. Individual medical records were reviewed to retrieve demographic information, pertinent clinical data, treatment details, and disease status of each patient.

Results Out of 456 new cases referred to the subspecialty clinic, 329 (72%) were candidates for concurrent chemoradiation (CCRT) and brachytherapy (BT). Only 107 (32.5%) women have received treatment at the time of the study. Among these, 51 (48%) completed treatment, while 28 (26%) received external radiation therapy only, and another 28 (26%) were still ongoing primary treatment. The median

interval from first clinic consult to initiation of treatment was 85 days. The median total treatment duration was 81 days. Furthermore, only 4 women (8%) completed treatment within the recommended 56 days (8 weeks).

Conclusion This study showed that there was substantial delay in initiation and protraction in delivery of definitive radiation therapy in our cohort. Due to the severe imbalance of patients with ideal and protracted treatment duration, no factors were identified affecting radiation therapy delivery. Apart from supplementing the existing institutional infrastructure, other opportunities to improve the gaps in treatment planning and delivery were identified in this study.

2022-RA-1338-ESGO NTRK1-TPM3 FUSION POSITIVE CERVICAL SARCOMA – CASE REPORT OF A NOVEL SUBSET OF GYNAECOLOGICAL SARCOMAS, AND SUCCESSFUL TREATMENT OF RECURRENT DISEASE WITH TRK-INHIBITION THERAPY

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Introduction/Background NTRK genes encode tyrosine receptor kinases (TRK), proteins promoting cellular proliferation and survival. NTRK fusions are implicated in solid tumours including gynaecological sarcomas lacking diagnostic features of any sarcoma subtype. In 2020, UK NICE approved a histology-independent TRK-inhibitor drug, larotrectinib, for treatment of such tumours in both children and adults.

Methodology We present the case of a 49-year old female who presented with recurrence of an NTRK1-TPM3 fusion positive cervical sarcoma nine months following primary total abdominal hysterectomy (TAH) and bilateral salpingo-oophorectomy (BSO).

Results The patient was initially referred with a large cervical mass measuring 9 cm on imaging. Biopsy demonstrated high grade malignant tumour of spindle cell morphology. She underwent TAH and BSO. Specimen microscopy revealed a poorly differentiated sarcoma composed predominantly of spindle cells, with moderate/severe pleomorphism and brisk mitotic activity. Pan-TRK immunohistochemistry was positive, FISH revealed an NTRK1 translocation and next-generation sequencing confirmed an NTRK1-TPM3 fusion. Postoperative CT revealed no residual tumour and the patient was placed under close surveillance. Nine months later, the patient presented with vaginal bleeding. A 7 cm upper vaginal mass was seen on examination, which was diagnosed as NTRK-positive leiomyosarcoma recurrence. CT showed the presence of pulmonary metastases. Although four cycles of doxorubicin were administered, the pulmonary masses continued to progress. Larotrectinib was administered as an alternative therapy due to the tumours' NTRK positivity. The patient received 12 cycles of larotrectinib 100 mg BD over 10 months. This led to reductions in lung metastases size and no progression of the pelvic mass. Two years postoperatively, the patient remains stable and continues to be monitored.

Conclusion Excellent durable response and improved survival was achieved. Testing for NTRK should be done and NTRK inhibitors considered for advanced gynaecological sarcomas. Future research will further assess the efficacy of TRK-inhibition therapy as primary, neoadjuvant and adjuvant treatment.

2022-RA-1340-ESGO EFFECT OF ALPHA-LIPOIC ACID SUPPLEMENTATION ON OXIDATIVE STRESS MARKERS IN PATIENTS WITH LSIL

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Introduction/Background The goal of study was to examine the effects of alpha-lipoic acid (LA) supplementation on oxidative stress markers in patients with low-grade squamous intraepithelial lesion (LSIL).

Methodology One hundred (100) patients diagnosed with LSIL were randomized to receive 600 mg/day of LA (treatment group-T) or placebo (control-C) for three months. Ninety (90) patients finished the study (40 controls and 50 treated). Venous blood was collected for analysis of oxidative stress markers (plasma ferric reducing power (FRAP), superoxide dismutase (SOD) activity, reduced glutathione levels (GSH) and malondialdehyde levels (MDA)) at baseline and at 90th day of supplementation. All patients were instructed to fulfil validated food frequency questionary (FFQs) to investigate average intake of food derived antioxidants (number of fruit/vegetable portions and intake of nutrients with antioxidative potency). The normality of the distribution of obtained data was tested using the D'Agostino – Pearson test. Obtained values were presented as median ± 95% confidence range and comparison of results (before-after supplementation/control-tested) was performed using the Mann-Whitney U test for the significance level $p < 0.05$.

Results There were no significant differences between baseline FRAP, SOD, GSH and MDA levels between patients in control and treatment group. LA supplementation didn`t significantly impact SOD GSH or MDA levels but it increased TAC values, although observed changes were not statistically significant ($p=0.0893$). FFQ analysis revealed vegetable intake significantly affected baseline FRAP values-they were significantly lower in the group of patients with the lowest vegetable intake (4th quartile) in comparison to the group with the highest vegetable intake (1st quartile) ($p=0.0116$).

Conclusion LA supplementation in investigated regime (300 mg/day for 3 months) was not effective in improving oxidative status parameters in patients with LSIL. Analysis of FFQs revealed that nutritional patterns, rather than supplementation with antioxidant, can have significant impact on plasma antioxidant status in LSIL patients.