Late breaking abstracts

2022-LBA-790-ESGO SENTINEL LYMPH NODE DETECTION WITH MAGTRACE® IN CERVICAL CANCER

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Introduction This prospective observational study, named POEMCerca (Polish Evaluation of Magtrace® in Cervical Cancer) aims to evaluate efficacy of the Magtrace® system in SLN (Sentinel Lymph Nodes) detection in early stage cervical cancer patients in comparison with the standard of care. The nanoparticle paramagnetic detection systems of SLN have been proved so far to be comparable and non-inferior to the standard procedure of systematic lymphadenectomy in breast cancer and vulvar cancer patients.

Methods 16 patients with stage I cervical cancer received a cervical injection of superparamagnetic iron oxide tracer (Magtrace®). Magtrace® localized and detected SLN with magnetic counts and with visual inspection for their brownish colour. For each SLN the anatomic site, magnetic counts and colour was documented before biopsy. Afterwards, systematic lymphadenectomy – pelvic (PLND) and paraaortic (PALND) – in some cases (high grade tumour and/or adenocarcinoma) was performed as the standard of care.

Results SLN were detected in every patient. Bilateral SLN were found in 87.5% of cases. The mean SLN count per patient was 3.9. All SLN were assessed as brownish stained. In one SLN micrometastasis was detected. Statistic results have been presented in the table 1.

Statistic | Value | 95% CI
--- | --- | ---
Sensitivity | 6.25% | 0.16% to 30.23%
Specificity | 100.00% | 79.41% to 100.00%
Negative Likelihood Ratio | 0.94 | 0.83 to 1.06
Positive Predictive Value | 100.00% |
Negative Predictive Value | 90.57% | 89.43% to 91.59%
Value | 90.62% | 74.98% to 98.02%

Conclusions This preliminary study showed efficient Magtrace® detection of SLN in early stage cervical cancer patients which is not inferior to the standard of care.

2022-LBA-1282-ESGO IDENTIFYING WOMEN WITH EARLY-STAGE CERVICAL CANCER AT LOW RISK OF LYMPH NODE METASTASES, IN A LARGE INTERNATIONAL COHORT – A LOGISTIC REGRESSION ANALYSIS, WITHOUT SHARING PRIVACY-SENSITIVE PATIENT DATA

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Introduction Standard treatment of early-stage cervical cancer is radical hysterectomy with pelvic lymphadenectomy. However, a generic benefit of systematic lymphadenectomy is questionable, as most women will not have metastatic nodes. This study aimed to classify the most important risk factors of lymph node metastases (pN+) and to identify a group of women at low risk of pN+, in a large cohort of Danish, Swedish and Dutch women, using federated learning.

Methods Women diagnosed with cervical cancer between 2005–2020 were identified from nationwide population-based registries: the Danish Gynaecological Cancer Database, Swedish Quality Registry of Gynaecologic Cancer and Netherlands Cancer Registry. Inclusion criteria were: squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma; FIGO 2009 stage IA2, IB1 and IIA1; treatment with radical hysterectomy and pelvic lymph node assessment. We applied privacy-preserving federated logistic regression to identify risk factors of pN+(figure 1). Significant factors were used to identify a low-risk group of pN+(1.8% to 3.0%).

Results A total of 3,606 women were included. The most important risk factors of pN+ were lymphovascular space invasion (LVI; odds ratio [OR] 5.16, 95% confidence interval [CI] 4.59–5.79), tumour size 21–40 mm (OR 2.14, 95% CI 1.89–2.43) and depth of invasion ≥10 mm (OR 1.81, 95% CI 1.59–2.08). Tumours without LVI, a size ≤20 mm and a depth of invasion ≤10 mm were associated with a low risk of pN+ (2%, 95% CI 2–3%) (table 1).

Abstract 2022-LBA-790-ESGO Figure 1

Abstract 2022-LBA-790-ESGO Table 1

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