



## P104. UTILITY OF HE4 TO IDENTIFY PATIENTS WITH ENDOMETRIOID ENDOMETRIAL CANCER WHO MAY REQUIRE LYMPHADENECTOMY

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**Context:** Although there are no biomarkers that are routinely used in endometrial cancer (EC) management, many studies have found that serum HE4 is superior to CA125 in the detection of EC.

**Objective:** The aim of our study was to evaluate if preoperative serum levels of HE4 and CA125 are good predictors for lymphadenectomy in early stage ECs and to determine the cutoff value with the maximum prognostic power.

**Methods:** The levels of HE4 and CA125 were determined via ELISA methodology.

**Patient(s):** Seventy-eight postmenopausal patients treated surgically for early stage endometrioid adenocarcinomas was served as study group.

**Intervention(s):** The ROC curves were generated to determine the optimal cutoff values of preoperative HE4 and CA125 levels with optimum sensitivity and specificity for the prediction of lymphadenectomy. We calculated the accuracy, sensitivity, specificity, PPV and NPV for each prognostic marker alone and combined using these cutoff points.

**Main Outcome:** The median HE4 serum levels were significantly elevated among study group in patients who did not need lymphadenectomy in comparison to patients who required lymphadenectomy (median 129.8 pmol/l vs. 69.6 pmol/l, respectively;  $p=0.003$ ).

**Measure(s):** The examination of tumor grade revealed a significant difference in median serum HE4 levels between G1 and G2 tumors (75.4 vs. 98.2 pmol/l;  $p=0.032$ ) and between G1 vs. G2 and G3 tumors (75.4 vs. 102.5 pmol/l;  $p=0.011$ ).

**Result(s):** In our population, based on ROC curve, we found that HE4 value of 78 pmol/l is the best cutoff to identify candidates for lymphadenectomy with the sensitivity of 86.6% and the specificity of 67.2% (NPV=88.4% and PPV=51.2%).

**Conclusions:** Our results demonstrate that HE4 as a single marker has a greater sensitivity as a predictor pointing out the need for lymphadenectomy in early stage endometrioid adenocarcinoma compared with CA125 alone or HE4 and CA125 combinations.

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