A CASE-CONTROL STUDY OF ADIPOKINES IN ENDOMETRIAL CANCER AND CORRELATION WITH PROGNOSTIC FACTORS

Objective
Adipokines like leptin and adiponectin play an important role in inflammation, angiogenesis, apoptosis and tumourigenesis. Such adipokines are postulated to play a role in development of obesity related cancers like endometrial cancers. We aimed to study the serum levels of leptin and adiponectin in cases of endometrial cancers and normal controls.

Methods
A prospective case control study was conducted to study the serum levels of leptin and adiponectin in endometrial cancer patients and normal controls over a period of 24 months.

Results
Fifty-five cases of endometrial cancers and 25 controls were included in this study. Median serum levels of leptin among cases and controls were 59.7 (16.0–483.5) ng/ml and 38.0 (4.7–107.2) ng/ml, respectively (p=0.015). Median serum adiponectin levels among cases and controls were 8481.4 (1700.7–24956.28) and 9547.5 (3015.0–24257.0) ng/ml, respectively (p=0.906). Leptin:adiponectin (L:A) ratio was significantly higher in cases than in controls (0.0086 v. 0.0042, p=0.014). Due to high standard deviation of values from mean, leptin, adiponectin and L:A ratio were analysed in tertiles among cases and controls. Only age and BMI were significantly correlated with higher tertile of serum leptin and L:A ratio. prognostic indicators like grade, stage and myometrial invasion were not correlated with leptin and adiponectin tertiles.

Conclusions
Higher levels of serum leptin and lower levels of serum adiponectin seem to be positively correlated with cases of endometrial cancer. Adipokine levels did not show a correlation to histological prognostic markers.

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CHARACTERIZING ISOLATED TUMOR CELLS IN REGIONAL LYMPH NODES OF EARLY ENDOMETRIAL CANCER

Objective
To examine isolated tumor cell (ITCs) characteristics in regional lymph nodes of early-stage endometrial cancer.

Methods
This was a retrospective cohort study examining the Surveillance, Epidemiology, and End Result Program. The study population was 6,472 women with non-metastatic, node-negative T1 endometrial cancer who underwent primary hysterectomy and surgical nodal evaluation. Multivariable binary logistic regression model was used to identify independent characteristics for ITCs. Postoperative therapy according to ITCs status was also assessed with propensity score weighting.

Results
ITCs were seen in 111 (1.7%) cases. In a multivariable analysis, ITCs were largely associated with deep myometrial invasion (T1b versus T1a, 4.00% versus 1.00%, adjusted odds ratio [aOR] 3.42, p<0.001) and large tumor size (≥4 versus ≤4 cm, 3.00% versus 1.66%, aOR 1.55, P=0.037). Moreover, women underwent sentinel lymph node biopsy (SNL) had a higher likelihood of identifying ITCs compared to those undergoing lymphadenectomy (LND): 2.70% for SNL alone, 3.7% for SNL/LND, and 1.2% for LND alone (aOR ranged 2.60–2.99, P<0.001). Women who had ITCs identified were more likely to receive postoperative therapy (81.8% versus 31.7%, P<0.001), including external beam radiotherapy (EBT) alone (25.1% versus 3.2%) and chemotherapy/EBT (16.3% versus 1.9%). Similar associations were observed in the low-risk group (stage IA, grade 1–2 endometrioid, 78.4% versus 9.2%, P<0.001), including EBT alone (35.3% versus 0.6%).