

M Wong, TT Tam, DC Lam, MS Ip, JC Ho

Department of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong

**Background:** Expedient pathological diagnosis is crucial in selection of appropriate treatment in patients presented with superior vena cava syndrome (SVCS). The performance and safety of endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) in this setting is unknown.

**Methods:** Over a 4-year period, patients presented with SVCS in the presence of mediastinal mass and referred for EBUS-TBNA were enrolled for the study. The procedure was performed under local anaesthesia with conscious sedation. TBNA was performed under real-time with the curvilinear probe of EBUS. Rapid on site cytological examination (ROSE) was not available.

**Results:** Eighteen procedures of EBUS-TBNA were performed in 17 patients. Malignancy was confirmed in 16 patients (diagnostic yield, 94.1%). There was no major complication including significant bleeding or pneumothorax related to the procedures.

**Conclusions:** EBUS-TBNA has high diagnostic yield and is safe in patients presented with SVCS and mediastinal mass.

YC Woo<sup>1</sup>, AWK Tso<sup>1</sup>, A Xu<sup>1</sup>, LSC Law<sup>1</sup>, TH Lam<sup>2</sup>, SV Lo<sup>3</sup>, NMS Wat<sup>1</sup>, BMY Cheung<sup>1</sup>, KSL Lam<sup>1</sup>

Departments of <sup>1</sup>Medicine and <sup>2</sup>Community Medicine, The University of Hong Kong, Hong Kong

<sup>3</sup>Hospital Authority, Hong Kong

**Aims:** To identify obesity-related serum biomarkers associated with the development of type 2 diabetes in a Chinese population and to examine if these biomarkers added values to conventional risk factors in diabetes prediction.

**Methods:** We studied 1315 non-diabetic subjects from the prospective Hong Kong Cardiovascular Risk Factor Prevalence Study (CRISPS). Serum biomarkers including adiponectin, tumour necrosis factor-alpha R2 (TNF- $\alpha$  R2), leptin, adipocyte-fatty acid binding protein (A-FABP) and high-sensitivity C-reactive protein (hsCRP) were measured in baseline samples.

**Results:** A total of 75 participants developed diabetes over a median of 5.4 years. Low adiponectin, high A-FABP, hsCRP levels were, individually, significantly associated with incident diabetes after adjusting for age, sex, waist circumference (WC), FG, hypertension and dyslipidaemia. A backward stepwise logistic regression model analysing all the significant serum biomarkers showed that hypoadiponectinaemia and high A-FABP were independently associated with incident diabetes: OR=2.525; P=0.019; lowest versus highest quartile, for adiponectin and OR=2.801; P=0.022; highest versus lowest quartile, for A-FABP. Hypoadiponectinemia, but not A-FABP, significantly improved the log-likelihood of a clinical diabetic prediction (CDP) model including sex, age, WC and FG. The ROC curve showed that the CDP + adiponectin model provided a good prediction of diabetes (AUC=0.798; 95% CI, 0.753-0.842).

**Conclusions:** Our results suggested that serum levels of adiponectin, hsCRP and A-FABP were predictive of the development of type 2 diabetes in Chinese. Hypoadiponectinemia provides the best prediction with added value over traditional risk factors and is of potential use for risk assessment model development.