Medical Image of the Week: Tracheobronchopathia Osteochondroplastica

Figure 1. View of trachea during bronchoscopy showing submucosal nodules.

Figure 2. H & E staining of cartilage biopsy.
A 52-year-old asymptomatic woman underwent a low dose computed tomography (CT) of chest due to long-standing history of smoking. CT chest revealed a 4 mm right lower lobe pulmonary nodule. Also noted were several nodules throughout the trachea and in the left main-stem bronchus. Bronchoscopy revealed multiple non-obstructing submucosal nodules along the tracheal rings with sparing of the posterior membranous portion of the trachea (Figure 1). Endotracheal biopsy showed benign cartilage and ciliated epithelium (Figure 2). The patient was diagnosed with tracheobronchopathia osteochondroplastica (TO). Clinical manifestations of TO are nonspecific and include cough, wheezing, hemoptysis, dyspnea, and recurrent lung infections (1). Therapy for TO includes alleviation of symptoms with bronchodilators, treatment of respiratory infections and tracheal dilation. Therapeutic modalities for tracheal dilation includes surgical resection, laser ablation and vaporization. CT chest was to be repeated at 12 months for follow-up of the pulmonary nodule. The patient was lost to follow-up.

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Reference