Title: Endoscopic resection of airway benign tumors by argon plasma coagulation

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Body: Benign airway tumors with central airway obstruction require immediate intervention for symptoms relief. Argon Plasma Coagulation (APC) is a cheap tool readily available in hospitals. Four patients presented for obstructing tracheal or bronchial tumor (2008 to 2011). Initial investigations included fiberoptic bronchoscopy and CT imaging of the chest. Argon plasma was set to 35 Watt and delivered in non-contact fashion through a large fiber during rigid bronchoscopy. Initially tumor coagulation was done followed by mechanical resection and finally APC was applied to tumor base. Patients were discharged next day and followed clinically by CT imaging and bronchoscopy. All patients were reevaluated one year after ablation to eliminate recurrence. Case1: 24 years old female presented for uncontrolled asthma. Endoscopic resection with APC revealed tracheal schwannoma. Case2: 35 years old female, 6 month pregnant, intubated for respiratory failure due to obstructive tracheal tumor. Endoscopic resection yielded low-grade muco-epidermoid carcinoma of the trachea. Case3: 60 years old male, smoker, with concomitant sarcomatous carcinoma of the kidney presents for dyspnea, persistent cough and obstructive lesion of the right main bronchus. Ablation by rigid bronchoscopy and APC unraveled bronchial hamartoma. Case4: 57 years old male, smoker, presents for persistent cough. Rigid bronchoscopy and APC resection of right bronchial obstruction uncovered a hamartoma. APC is an effective and efficient tool to use during resection of benign bronchial tumors, it's safe to use in pregnant patient and provides immediate airway relief. Shwannoma, hamartoma and low-grade muco-epidermoid tumors can be treated with this modality.