INTRODUCTION

- Rare benign disease characterized by multiple submucosal osseous and cartilaginous nodules in trachea and bronchi with “rock garden” appearance.1
- Previously seen only incidentally on autopsy, now seen increasingly on high-definition CT and bronchoscopy.5
- Median age at diagnosis is 63 yo, though one case reported as young as 11 yo.5 Possible female predominance. Loose association with atrophic rhinitis and Klebsiella ozaenae.
- 85% present with chronic respiratory manifestations including cough, hemoptysis, dyspnea, or atrophic rhinitis.5
- The differential diagnosis includes saber-sheath trachea, relapsing polychondritis, tracheobronchial amyloidosis, papillomas, carcinomas, endobronchial sarcoidosis.

CASE PRESENTATION

- M. T. is a 67-year old female presenting with non-productive cough for 6 months. CT Chest revealed tracheal lesions thought to be papilloma.
- Past medical history: HTN, diabetes type II, depression, left breast infiltrating ductal carcinoma s/p left mastectomy and TRAM reconstruction
- Physical exam unremarkable. Chest clear to auscultation.
- Sputum culture: normal flora, negative acid-fast bacilli
- CT Chest: 15-22 nodules within trachea, each less than 5mm in size
- Bronchoscopy: multiple firm submucosal nodules on anterior and lateral walls of trachea from below cricoid to carina. Minimal bleeding on biopsy.
- Pathology: disorganized cartilaginous tissue with degeneration. No osseous tissue or squamous metaplasia.

DISCUSSION

- TO is a rare disease which is benign but can be progressive: minimal progression 28%, significant 17% 5.
- Rarely presents as obstructive lesions and can rarely result in difficult intubation4
- Although of unknown etiology, an association with atrophic rhinitis and Klebsiella ozaenae has been suggested though not proven.5
- 61% had positive bronchial bacterial cultures, likely from disruption of tracheal architecture and decreased mucociliary clearance5
- Bronchoscopic findings of multiple sessile submucosal firm nodules on anterior and lateral tracheal wall are pathognomonic
- Most patients require only nonspecific symptomatic treatment to minimize complications, though endoscopic laser resection has been reported for obstructive lesions1,2,4. A majority of patients will require antibiotic therapy for positive cultures.5
- Important to keep on differential to prevent unnecessary treatment or chemotherapy.

REFERENCES