Clinical case 2: Tracheobronchial aspergillosis with tuberculosis tracheal stenosis

BB is a 55-year-old female presented with productive cough and new onset of fever, dyspnea and chest pain. She had a history of pulmonary tuberculosis 35 years prior and was treated with antituberculous medications for 2 years. Post-tuberculosis tracheal stenosis was diagnosed 10 years ago and was treated with laser and dilation... Patient has been on inhaled fluticasone twice daily for several years. She had bilateral wheezes and stridor on neck auscultation. White blood cell count was 7,600 cells/µl, with 91% neutrophils. Chest radiograph and computed tomography scan showed narrowing of the airway in the mid trachea. She also had a collapsed right upper lobe and mid tracheal stenosis of 7 mm diameter. Flexible bronchoscopy showed white pseudomembranes covering the vocal cords and the entire trachea to the carina, extending down the posterior membrane of the left main bronchus. There was circumferential narrowing of the mid trachea to 7 mm. The right upper lobe bronchus was closed from old TB. Biopsy of pseudomembranes revealed Aspergillus. The patient is single and travels widely. She wants to return to work as soon as possible.

After addressing items of the four boxes, briefly respond to the following questions:

1. Describe the various airway findings of tracheobronchial aspergillosis.
2. Identify advantages and disadvantages of airway stent insertion in patients with tracheal stenosis and active airway infections.
3. Describe the various medical treatment modalities for Tracheal bronchial Aspergillus infection.