

Bronchoscopic resection preceded by bronchial artery embolization of a large right main bronchial carcinoid tumour

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BACKGROUND: Bronchial carcinoid tumours are relatively rare neuroendocrine tumours and account for about 1-2% of all primary lung malignancies. They are usually well circumscribed, slow growing tumours but have high chances of massive bleeding. The endobronchial carcinoids can be managed by bronchoscopic resection as a less invasive option as compared to surgery. Massive bleeding can be prevented by bronchial artery embolization prior to bronchoscopic resection.

CASE REPORT: A 29 years old female presented to us with complaints of cough, breathlessness and intermittent mild haemoptysis for last 2 years. Her computed tomography (CT) of chest showed a mass in the right main bronchus with complete collapse of the right lung. Diagnostic bonchoscopy was performed which showed a large, round, highly vascular endobronchial mass completely obstructing the right main bronchus. Endobronchial biopsies from the mass confirmed the diagnosis of typical carcinoid tumour. The patient was planned for rigid bronchoscopic resection of the endobronchial carcinoid. In view of high risk of bleeding, bronchial artery embolization was performed prior to bronchoscopic resection. Rigid bronchoscopic intubation was done. The endobronchial mass was then ablated with holmium laser, followed by piecemeal removal with electrocautery snare and rigid forceps. Complete resection of the tumour could be done with minimal bleeding. The patient was discharged the next day.

CONCLUSION: Bronchoscopic resection is a less invasive option and can be curative in many patients with typical endobronchial carcinoid. Bronchial artery embolization can significantly reduce the chances of massive bleeding during bronchoscopic resection of these tumours and should be considered in these patients prior to doing the procedure.



Figure 1 – Right main bronchial carcinoid tumour



Figure 2 – Bronchoscopic image after Complete resection of the carcinoid tumour