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Title: The biphasic flow volume loop – A case report of post-tuberculosis left main bronchus (LMB) stricture

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Body: Gascoigne et al. described the biphasic spirogram as a clue to unilateral narrowing of a mainstem bronchus in 1990. Sporadic case reports, have emerged since, in patients with endobronchial neoplasms with this characteristic pattern of flow volume loop. We present a case of LMB obstruction secondary to post-tuberculosis stricture with this biphasic spirogram. Miss L is a 38-year-old Chinese lady with a medical history of pulmonary tuberculosis in 2003. This was complicated by bronchiectasis and LMB stricture. She was referred to our institution in 2012. High resolution thoracic CT revealed an asymmetrical smaller calibre of left main bronchus, with short segment of tight stenosis immediately proximal to its bifurcation. Flexible bronchoscopy revealed a stenotic web at distal LMB, 3cm below main carina (Figure 1). Initial flow volume loop (Figure 2) was suggestive of a unilateral bronchial obstruction. She underwent rigid bronchoscopy and Nd-YAG laser resection of webbed stricture at distal LMB (Figure 1). Flow volume loop and flexible bronchoscopy post-procedure (Figure 2) showed improvement in LMB obstruction.