Letter to the Editor

Prompt surgery for massive hemoptysis: more acceptable than it was reported

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We read with interest the article by Jougon et al. [1] concerning the treatment of massive hemoptysis. The authors reported a mortality rate of 23% in patients who were operated on immediately close to bleeding crisis. There were six pneumonectomies and six lobectomies in this group. In massive hemoptysis patients, prompt lateralization, localization and appropriate surgical intervention are of pivotal importance and may lead to acceptable mortality rates. We reviewed our experience in 29 patients with massive hemoptysis (>600 ml/24 h). We performed 17 lobectomies (58.6%), five pneumonectomies (17.2%), three segmentectomies and three bilobectomies and one physiologic lung exclusion. Two patients had been resuscitated and intubated in the emergency department. Following rigid bronchoscopy and aspiration of blood clotting and fresh blood, emergency intubation and lung isolation using one-lung intubation or double-lumen intubation tube were accomplished. During the operation, the lung or part of the lung (lobe or segment) from which the intrabronchial hemorrhage originated could be localized in 27 patients (93.1%), by a localized radiologic appearance, emergency endoscopy or combination of these techniques and could be confirmed by bronchotomy to the bronchus of the suspected part of the lung (segment or lobe) or lung itself (i.e. bronchus first method). Probably due to having known the localization of the bleeding site in most patients, we only experienced 11.5% of mortality (i.e. three patients). We also believe that, delay in the surgical treatment (in tomographic examination, observation) of the patients with massive hemoptysis leads to exanguination and higher mortality and morbidity rates. Previously, when the initial treatment of massive hemoptysis has been believed to be medical, the mortality rate was reported to be as high as 50–85% [2]. Similarly, the authors found the mortality rate of non-surgically treated patients (i.e. Group 3) to be 26% which could be considered to be fairly high. In their series, a suboptimal effort to localize the bleeding site and delay in emergency surgery possibly due to the computerized tomography (CT) and pulmonary function test analyses might lead to the higher mortality rate (i.e. 23%) in the immediate surgery group (i.e. Group 1). Gourin and Garzon recommended prompt surgical resection for any individual who has bled more than 600 ml in 24 h or less [3]. This approach also decreases the number of pneumonec- tomies since rigid bronchoscopic evaluation during active bleeding provides better localization of hemorrhage in the lung. In patients in whom the site of bleeding was seen but the exact involved lobe was not identified using rigid bronchoscopy, bleeding lobe can be found via a small bronchotomy near to the suspected lobar carina.

In our series, all patients except six were followed-up for at least 1-year (range, 1–6 years) and we recorded only one patient with recurrence that required a completion pneumonectomy.

We believe that, emergency surgical pulmonary resec- tion following rigid bronchoscopy is a life-saving procedure with acceptable mortality and morbidity rate in all patients with massive hemoptysis.

References


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