Original article:

Management of heamoptysis during flexible bronchoscopy with cold saline vs Botropase-a prospective clinical study

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Abstract:

Introduction: Heamoptysis is frequently encountered in clinical practice and may be the presenting symptom of number of diseases. although massive heamoptysis accounts for only 5-15% of episodes. Our aim was to c control of heamoptysis during flexible bronchoscopy either mild or moderate by using cold saline vs botropase.

Material & methods: 24 cases of heamoptysis were observed during flexible bronchoscopy in one year duration from January 2015 to December 2015. Minimal or moderate heamoptysis were developed in process of bronchoscopy. On insertion and touching of friable growth or biopsy of intrinsic growth. before doing bronchoscopy,

Conclusion: Heamoptysis was the commonest complication during bronchoscopy. Minimal to moderate bleeding controlled by cold saline and botropase instillation but massive heamoptysis needs vascular embolisation or surgical resection.

 $\textbf{Keywords:} \ \text{Heamoptysis} \ , \ \text{clinical practice}$

Introduction:

Heamoptysis is frequently encountered in clinical practice and may be the presenting symptom of number of diseases. although massive heamoptysis accounts for only 5-15% of episodes (1). It should always be considered as a life threatening condition that warrants effective assessment and management. Massive heamoptysis is life threatening because of asphyxiation from flooding of central airways with blood (2). We usually do rigid

bronchoscopy to control bleeding management. but flexible bronchoscopy procedure, when we do any biopsy, it will lead to bleeding either minor or moderate. such bleeding is controlled by cold saline instillation or boltropes instillation.wwe made a study which is best drug to control immediate bleeding, either cold saline or boltropes and transamenic acid or both. we declared the study, combination of cold saline and botro[pase is best choice for haemostatic. Our aim was to c control of

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heamoptysis during flexible bronchoscopy either mild or moderate by using cold saline vs botropase.

Material & methods:

24 cases of heamoptysis were observed during flexible bronchoscopy in one year duration from January 2015 to December 2015.. Minimal or moderate heamoptysis were developed in of bronchoscopy. On insertion and process touching of friable growth or biopsy of intrinsic growth. before doing bronchoscopy, we did bleeding time, clotting time and prothombin time to rule out any bleeding disorders. Instillation of cold saline at site of bleeding was the usual procedure which controll bleeding .if bleeding was persistent then we added inj.botropase 1ml through bronchoscope. Sometimes if bleeding contused then we added inj.transamenic acid intravenously 5ml bolus dose. Whenever it is bleeding we should keep tip of bronchoscope wedging the bleeding site to apply compression for 1 or 2 minutes. This will stop bleeding of small vessels. again observe the site of bleeding for any spurting of bleeding. blledwas controlled continued then

bronchoscopy. We observed 18 cases of minimal bleeding on bronchoscopy and 6 cases of moderate bleeding.

Total no.bronchoscopy cases: 30
Total no.of heamoptyusis cases: 24
Minimal heamoptysis cases: 18
Moderate heamoptysis cases: 6
Massive heamoptysis cases: nil

Discussion:

Heamoptysis is a common complication with good prognosis in most cases.(3).heamoptysis during flexible bronchoscopy was a known complication seen in our study where 24 cases out of 30 were having bleeding. Complication of massive heamoptysis were not encounter during bronchoscopy.massive bleeding cases required immediate vascular embolisation or surgical resection(4)

Conclusion:

Heamoptysis was the commonest complication during bronchoscopy. Minimal to moderate bleeding controlled by cold saline and botropase instillation but massive heamoptysis needs vascular embolisation or surgical resection.

References:

- 1. Marsico GA, Montessi J. Hemoptise. In: Tarantino AB, editor. Doenças pulmonares. 5ª ed. Rio de Janeiro: Guanabara Koogan, 2002;22-32.
- 2. Conlan AA. Massive hemoptysis Diagnostic and therapeutic implications. Ann Surg 1985;17:337-54.
- 3. Bobrowitz ID, Ramakishma S, Shim YS. Comparison of medical v. surgical treatment of major hemoptysis. Arch Intern Med 1983;143: 1246-343.
- 4. Crocco JA, Rooney JJ, Frankaushen OS, Di Benedetto RJ, Lyons HA. Massive hemoptysis. Arch Intern Med 1968;121:495-8.

- 5. Amirana M, Freter R, Tirschwell P, Janis M, Blomberg A, State D. No aggressive surgical approach to significant hemoptysis in patient with pulmonary tuberculosis. Am Rev Respir Dis 1968;97:187-92.
- 6. Marsico GA. Controle da hemoptise maciça com broncoscopia e soro gelado [Tese]. Rio de Janeiro, UFF; 1991.
- 7. Marsico GA. Hemoptise maciça Métodos de controle. JBM 1994; 66:19-36.