

Is coagulation profile routinely indicated in Epistaxis?

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Background: Epistaxis is the most common ENT emergency worldwide.¹ It is also common ENT problem in Nepal. Most cases of epistaxis don't have an easily identifiable cause. Both local and systemic processes can play a role in it.² Treatment of severe epistaxis can encompass different modalities.³

Objective: To observe the significance of coagulation studies to find out a cause for epistaxis.

Materials and Methods: A retrospective chart review of coagulation studies of 124 cases (male=85, female=39) of epistaxis patients admitted in ENT-Head and Neck Surgery ward of T.U. Teaching Hospital from January 2005 to June 2006 was performed to find out the coagulation disorder in such patients.

Results: There were 124 patients with epistaxis admitted during the study period of 1 1/2 year duration with M: F ratio 2.2:1. Prothrombin Time ranged between 11-16 seconds, Bleeding Time between 2-8 minutes, Activated Partial Thrombin Time between 25-35 seconds, and International Normalized Ratio between 0.8-1.2. All those values being normal, we did not further investigate for factor assays. None of the patients with epistaxis had coagulation profile derangement.

Conclusion: From our study it seems that routine coagulation profile is not necessary in patients with epistaxis. The indications for coagulation profile testing in patients with epistaxis should be identified by a more scientific larger study. At present, the tests should be done when there is high suspicion of such disorders.

Key words: Coagulation disorder, Epistaxis.

Introduction

Epistaxis is the most common ENT emergency worldwide.¹ It is also common ENT problem in Nepal. Most cases of epistaxis don't have an easily identifiable cause. Both local and systemic processes can play a role in it.² Treatment of severe epistaxis can encompass different modalities.³

The role of routine coagulation studies is still unclear. There are different thoughts whether epistaxis is frequently associated with coagulation disorder or not. So, this study was done to know the association of coagulation profile in epistaxis patients.

Materials and Methods

One hundred twenty four cases of epistaxis (85 male and 39 female) admitted in ENT & Head and Neck Surgery ward of TU Teaching Hospital from January 2005 to June 2006 were enrolled in this study. Medical records of all those patients were collected from record section and retrospectively analyzed. Data were analysed by simple manual analysis using frequency and percentage.

Results

There were 124 patients admitted during the study period

of 1 1/2 year duration with M: F ratio 2.2:1. Most of the patients with epistaxis in both genders were more than 60 years. Among 124 patients, 66.1% were smokers (ex/current) while 46.0% consume alcohol (ex/current). Prothrombin Time of the patients ranged between 11-16 seconds, Bleeding Time between 2-8 minutes, Activated Partial Thrombin Time between 25-35 seconds, and International Normalization Ratio between 0.8-1.2. All of these values were in normal range. Further investigations for factor assays were not performed as all the findings were normal.

Discussion

Epistaxis is a common condition and number one emergency as well as frequent with up to 60% of people experiencing one episode in their life time and 6% seeking medical attention.⁴ The incidence of epistaxis was 60.4/1000 ENT admitted patients per annum in a study done at TU Teaching Hospital.⁵ Epistaxis is found to be the most common ENT emergency in TU Teaching Hospital, Kathmandu.

Epistaxis is not a diagnosis. It may be a symptom or a sign. There are different causes of epistaxis both local and systemic. Study by Christensen et al showed that aetiology has been found as idiopathic (61%), previous surgery (11%), anticoagulants (9%), trauma (7%) and other causes (12%).³ Vaamonde et al reported association of use of anticoagulants or antiplatelet drugs which was 11.1%.⁶

The role of routine coagulation studies in the management of patients suffering from epistaxis is unclear. Study by Thaha et al revealed that 10(8.3%) had abnormal results and all were taking warfarin or a combination of warfarin and aspirin.⁷ In the absence of a personal or family history of bleeding, a normal PT and/or PTT on repeat testing has a negative predictive value of more than 95%.

Study by Adhikari et al in Nepal also observed that there were not a single patient with coagulation disorder had epistaxis although one patient had Chronic Myeloid Leukaemia.⁵ Our recent study also showed that there was not a single patient with epistaxis which had coagulation disorder. Patients taking warfarin or aspirin were not admitted in ENT ward of our hospital with history of epistaxis.

Although coagulation screens will not predict the potential management problem associated with the epistaxis patient, they remain an important part of the clinical investigation. The investigation for potential haemostatic disorders should be performed when clinically indicated.

Conclusion

There are several studies which support the view that epistaxis is associated with coagulation disorder. But from our study it seems that routine coagulation profile is not necessary in patients with epistaxis. The indications for coagulation profile testing in patients with epistaxis should be identified by a more scientific larger study. At present, the tests should be done when there is high suspicion of such disorders.

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