



RECURRENT EPISTAXIS OF ADULT IN TROPICS

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ABSTRACT

Introduction

The ENT specialist in a tropical environment is very often confronted with nosebleed. It is the revealing sign of a general or local disease.

The objective of this work was to study the different etiological factors and therapeutic aspects of recurrent nosebleed encountered in our service.

Patients and Methods

This study was conducted from January 2011 to April 2012 focused on 75 patients seen in consultation or hospitalized in the department of ENT diseases, reference health center N°IV Bamako (MALI).

All patients of both sexes with bleeding repetitive nature found by the anterior rhinoscopy are included in the study.

The laboratory tests are requested.

Results

We found on 75 patients of the study 36 men (48%) and 39 women (52%) aged from 16 to 90 years old with an average age of 39 years. The causes of recurrent epistaxis were: Subatrophic rhinitis 36 cases (48%), Arterial hypertension 13 cases (17.34%). Nosebleed originated in majority of the anterior part of the septum in 55 cases (73.33%), and was primarily unilateral in 41 cases (54.66%).

In most of the patients in the study 39 cases (52%) bleeding sedation has been obtained in the majority in cases by the lubricants of the nasal mucosa.

Conclusion

Recurrent nosebleed is a common pathology in tropical rhinology. The site of the bleeding was the anterior part of the nasal septum. Most of our patients have been improved by the use of nasal lubricants.

Key-words: recurrent epistaxis – etiological factors – therapeutical aspects- tropical environment

INTRODUCTION

The ENT specialist in a tropical environment is very often confronted with nosebleed [1,2, 3,4]. It's the revealing sign of a general or local disease [2]. In the absence of spontaneous sedation, it requires medical assistance by nasal packing or other adequate treatment [5,6,7]. This high incidence of epistaxis is due to rich vascularization of the nose [4]. Epistaxis may have the local causes (traumatism, atrophy of the nasal mucosa, vascular neoplasms of the nasal cavity and nasopharynx , foreign bodies ...) or general causes [crises of arterial hypertension, arteriosclerosis, acute infectious diseases, renal and hepatic diseases, abnormality of the blood coagulation, hereditary abnormality (Rendu-Osler-Weber disease) ...][1, 5 8].

The objective of this work is to study the different etiological factors and therapeutic aspects of recurrent nosebleed registered in our department.

PATIENTS AND METHODS

This study was conducted from January 2011 to April 2012 focused on 75 patients seen in consultation or hospitalized in the department of ENT diseases, reference health center N°IV Bamako (MALI).

Inclusion criteria: all patients of both sexes with bleeding repetitive nature found by the anterior rhinoscopy.

Exclusion criteria: all patients of both sexes with a bleeding of the nose caused by a facial trauma or surgery. The anterior rhinoscopy allowed discovering the site of bleeding and revealing any affection of the nasal mucosa. A series of laboratory tests requested for highlight the existence of general pathology and justify an etiological therapy.

RESULTS

The Table I shows the distribution of patients by age and sex;

Table I: Distribution of patients by age and sex.

AGE	Male		Female	
	Number	%	Number	%
16-25	12	33.35	15	38.47
26-35	9	25	2	5.12
36-45	4	11.13	6	15.39
46-55	3	8.34	8	20.52
56-65	3	8.34	3	7.69
66-75	3	8.34	3	7.69
>75	2	5.5	2	5.12
Total	36	100	39	100

The Table II specifies the Characteristics of bleeding by side and sites

Table II. Characteristics of bleeding by side and site

Characteristics of bleeding (side and site)

Unilatéral	41(54.66%)
Bilatéral	34(45.34%)
<i>1/3 anterior part</i>	<i>55(73.33%)</i>
<i>1/3 middle part</i>	<i>13(17.34%)</i>
<i>1/3 posterior part</i>	<i>6 (8%)</i>
<i>Inferior turbinate</i>	<i>1(1.33%)</i>

The etiologies of bleeding are represented on **the table III**

Table III: Distribution of patients according to the etiology of epistaxis.

ETIOLOGIES	PATIENTS	
	Number	%
Subatrophic rhinitis	36	48
Arterial hypertension	13	17.34
Angiofibroma of the nasal septum	6	8
Anemia	6	8
Arteriosclerosis	4	5.34
Others tumors of the nasal cavity	3	4
Pregnancy	2	2.67
Disease of kidney	1	1.33
Benign hemopathy	1	1.33
Angiofibroma of the inferior turbinate	1	1.33
Vasomotor headache(migraine)	1	1.33
Typhoid Fever	1	1.33
Total	75	100

The treatment of recurrent nosebleeds is focused **on table IV**.

Table IV: Treatment of recurrent nosebleeds.

Therapeutic attitudes	Patients	
	Number	%
nasal saline solution and lubricants products	39	52
Anterior nasal packing	20	26.66
Cauterization by the silver nitrate with 40 %	12	16
Posterior nasal packing	2	2.67
Hemostatic ointment	2	2.67
Total	75	100

DISCUSSIONS

Recurrent nosebleed is a common disease in our service with its various directives in its treatment, young patients are especially concerned; the patients aged from 16 to 25 age group constitutes 38.47%. Terentiev GV [3] in a study carried out in Algeria note also a high frequency in the population of young patients with 58.87%.

Differently, the European work mentions a predominance of subjects aged over 50 years with a recurrent epistaxis: Derbinëva TN (58%) [2], Vlasiouk AN (57.12%) [9]. in our series, most of the bleeding came from the 1/3 anterior part of the septum at 55 patients (73.33%). In the literature, this frequency is similar to that of Vlasiouk AN [9] and Guapanovitth TA [10] respectively citing 71.4% and 92%. The posterior location of the bleeding is less frequent in our series, it represents 6 cases (8%), Vlasiouk AN [9] founded 9 cases (8.1%) and Guapanovitth VY[10] 12 cases (8%). Derbinëva TA [2] found a higher rate of 60%

and Jackson KR [11] 26%. Subatrophic rhinitis, arterial hypertension, anemia and angiofibroma of the nasal septum are the main causes of recurrent nosebleed in our study. We found 36 cases (48%) of subatrophic rhinitis, It is due in part to the action of the climate (sunny environment, winds of dusts of the Sahara desert ...) on the nasal mucosa by causing a local drying in the nasal cavity which constitute a real risk of bleeding, Sacko HB[4]. Terentiev GV [3] reported a higher rate of 90.29%. Other authors have obtained a rate lower than our: Guapanovitch VY [10] 6.75% and Vlasiouk AN [9] 20%.

Anemia is a sign of general alteration of the human being caused by many tropical diseases; it promotes processes of dystrophy of the blood vessels in the nasal cavity [3,12]. Nasal bleeding accompanies acute infectious diseases in the tropics (Malaria, typhoid fever, influenza ...) attended by high body temperature in the presence of which vascular permeability increases, and blood coagulation is impaired[1, 3, 5]. In our study, the anemia represented 8 %. This frequency is lower in the series of Vlasiouk AN [9] and Guapanovitch VY[10] which emphasize respectively: 3.07% and 2.02%. Arterial hypertension, once considered by the common pathology in the developed countries progressively installs itself in our low income countries; it is the cause of severe and recurrent epistaxis [4] The hyperactivity of coagulate factors of the blood stream causes a local vascular disorder [3,7,13]. We report 13 cases (17.34%) of epistaxis related to high blood pressure; the European and North American studies are emphasized the high frequencies: Jackson KR [11] 64%, Derbinëva TN[2] 53%, Guapanovitch VY[10] 39.18% and Vlasiouk AN[9] 38.46%.

Differently, Roguet E [14] from the Val-de-Marne (France) and Agrifoglio A [15] in Lausanna (Switzerland) report lower rates 1.54% and 20%.

Two of our patients (2.67%) have presented an epistaxis during pregnancy. Derbinëva TN [2] found 2.8%, similar to that obtained in our study frequency. Some authors attribute the cause of this epistaxis to eclampsia where blood vessels undergo the action of released toxins and other capillary stasis.

On the treatment plan, In most of our patients 39 cases (52%), sedation of bleeding has been obtained in the majority of cases by the local use of nasal damping solutions(physiological and saline solutions) and nasal lubricants (ointments of traditional tropical plant and of vitamin A). We had used rarely anterior or posterior nasal packing, only 22 cases (29.33%). Vlasiouk AN [9] reported 19.64%, however Jackson KR[4] very often used the nasal packing (79%).

CONCLUSION

Recurrent nosebleed is a common pathology in tropical rhinology, which requires often urgent therapeutic measures. Subatrophic rhinitis, Arterial hypertension, anemia and Angiofibroma of the nasal septum are the main etiological factors of recurrent epistaxis in the adult in our department. The site of the bleeding was the anterior part of the nasal septum and was especially unilateral. Recurrent epistaxis is generally a benign pathology in our service. Most of our patients have been improved by the use of the nasal saline solution and lubricants products.

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