

HEMATOHIDROSIS-A RARE KNOCKER AT OTOLARYNGOLOGIST'S DOOR

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ABSTRACT

Hematidrosis or hematohidrosis is an extremely rare clinical phenomenon in which a spontaneous recurrent painless and self-limited bleeding from skin in any part of the body, with diverse causal etiologies and inconstant success to different current management modalities. Our case studies report the clinical finding of two cases of a very rare ontological hematohidrosis. It is an extremely rare medical condition, with very few cases reported in literature.

Keywords: Hematohidrosis, stress, propranolol.

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INTRODUCTION

Hematidrosis represents a strange and extremely rare medical condition where the affected individual literally sweats bloody fluid through the sweat pores. The skin is usually anatomically and histologically normal, having no evidence of trauma anywhere. Though, characteristically hematidrosis means blood in sweat, but basically blood is mixed with sweat like material somewhat than true sweat in this disorder¹.

The word "hemato folliculo hidrosis" was suggested by Manonukul *et al.* because it seemed along with sweat-like fluid and the blood exuded via the follicular canals². Numerous contributing factors have been proposed by Holoubek; like part of systemic disease, vicarious menstruation, too much exertion, psychogenic, psychogenic purpura, and mysterious causes. Acute anxiety and deep mental contemplation are the most frequent causes³. Tshifularo M reported it as under extreme physical or emotional stress this may occur in religious (Jesus Christ prayer experience in Gethsemane) and non-religious (soldier sweat blood before battle) conditions.

The diagnosis of hemato hidrosis is made on the presence of bloody discharge through intact skin without any obvious cause, observed and

confirmed by health professional and the existence of blood components on biochemistry studies of the discharge with normal lab investigations⁴.

Hematidrosis rarely causes serious side effects, though some people experience dehydration and anxiety. Psychological counseling can also help if a person with hermatidrosis has depression and anxiety.

CASE REPORT

Our first case was a 27-year-old female patient who reported to the department of ENT & Head and Neck Surgery with the chief complaint of recurrent bleeding from both ears for the last 6-8 years (fig-1). She also used to have blood tinged tears for which she had been thoroughly investigated at eye department of a tertiary care hospital but no cause could be found. She had no co-morbid and was not on any medication. There was no previous history of heavy menstrual bleed, bleeding from any other site or bleeding on exposure to trivial trauma. Moreover there was no family history of any bleeding disorder. Her symptoms used to aggravate during period of emotional stress.

Examination revealed an anxious looking young lady who was vitally stable and with no positive finding on general and systemic examination. Examination of ears showed crusted blood in both external auditory meatuses without any break in skin or integrity of tympanic

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membrane. There was no mass, ulceration or any lesion apart from crusted blood, examination of both ears was therefore essentially normal. Nose and throat exam did not reveal any abnormality. Her blood complete picture, coagulation profile, autoimmune profile, hepatic & renal functions



Figure-1: Showing recurrent bleeding from both ears.



Figure-2: Showing under treatment of psychiatrist.

were all within normal limits. Lab examination of crust from external auditory meatuses confirmed it to be blood.

On the basis of history, clinical exam and lab investigation, she was diagnosed to be suffering from haematohidrosis. She was started with tablet propranolol and tablet escitalopram. She was counselled about the non-life threatening diagnosis and was instructed to effectively cope with stressful conditions. She lost to follow-up till was hospitalized with gestational hypertension and ENT opinion was sought by gynaecologist. Both the gynaecologist and patient were explained about the benign nature of the condition. The patient was advised to restart the medication after termination of gestation. On solitary follow-up she was doing fine.

Our second case was a 34 years old female who was a known case of depression and was under treatment of psychiatrist (fig-2). She pre-

sented with recurrent bleeding from nose and ears. The bleeding used to be unprovoked, self-limiting and was not used to be associated with pain or any other symptom.

Examination revealed crusted blood in external auditory canal without an abnormality of ears. Crusted blood was also seen in nasal vestibule but nasal mucosa and skin were normal. The bleeding episodes were associated with periods of rage and stress. There was no history of heavy menstrual bleed, bleeding from any other site or bleeding on exposure to trivial trauma. There was no family history of any bleeding disorder. All her laboratory investigations failed to reveal an abnormality. She was diagnosed to be suffering from haematohidrosis. She and her husband were counselled about the disease and her treatment was modified in consultation to psychiatrist and propranolol was added. She was followed up for three months and was doing well, later she lost to follow up due to shifting of residence.

DISCUSSION

Hematidrosis or haematohidrosis also known as blood sweat, is a sporadic condition in which a human sweats blood. This condition predominantly is reported in females. Blood generally oozes from the forehead, umbilicus, nails and other skin surfaces. In addition, oozing from mucocutaneous surfaces causing bloodstained tears, bleeding nose, bloodstained ear discharge and vicarious menstruation are common⁵. It has been proposed that acute fear and extreme strain can cause hematidrosis. The incidences may be headed by intense headache and abdominal pain and are commonly self-limiting. In some conditions, the secreted fluid is more dilute and look like to be blood-tinged, while others may have darker bright red secretions similar to blood⁶.

Sympathetic activation is a suspected cause in at least some of the cases because the administration of a sympathetic blocker (such as propranolol) may suppress further episodes over the next few months⁷.

Hematidrosis also results in the skin becoming tender and friable. Though the amount of blood loss usually is minimal, its effect on the body is weakness and mild to moderate dehydration from the both blood and sweat loss and the severe anxiety⁸.

Lab investigations such as blood complete picture, platelets count, platelet aggregation test, coagulation profile, hepatic & renal functions and skin biopsy reveal no abnormalities and direct light microscopy of fluid exhibits presence of normal red blood cells. Further studies also failed to show any vasculitis or skin appendages (i.e. sweat glands, sebaceous glands and hair follicles) anomalies^{3,9}.

Also, the condition remains one of gruesome fascination, but of great psychological suffering for the victim. Treatments offered for hematidrosis range from psychotherapy in the form of counseling and constant reassurance, to beta-blockers, and even alternative therapies in one case. Remission was spontaneous in some patients, but occurred either partially or fully following medical treatment in others¹⁰.

Although the condition is very rare but there are reports in medical literature of efficacious treatment with beta blockers (propranolol 10 mg) with significant decline in the incidence of spontaneous oozing of blood. The successful use of beta blockers supports the theory that the disorder is induced by strain, fear and anxiety still this etiology is not recognized. However the high incidence of stress, fear and anxiety in the modern era did not alter the prevalence of this exceptionally rare disease, suggesting that other co-abnormality also play a key role in this disease. Atropine sulfate transdermal patches have also been used with favorable results¹¹.

Satisfactory results with psychotherapy and psychoanalysis to reduce stress and anxiety

highlight the relationship between psychogenic causes and hematohidrosis¹².

CONCLUSION

Hematidrosis remains enigmatic due to its infrequent occurrence. Hematidrosis is so uncommon that studies on it frequently focus on a single case. Multiple investigations propose that tiny blood vessels that cause bloody sweat are more probable to rupture under intense strain and anxiety. The stress can be physical, emotional or both. Even though stress likely plays a role, it cannot fully clarify this phenomenon. Hematidrosis is not associated with or a symptom of any life-threatening medical conditions. The bleeding usually stops on its own, and even without treatment, symptoms may disappear over time.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any authors.

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