

Case Report

A rare case of hematohidrosis in a patient with paranoid schizophrenia

Tejas D. Gayal*, M. Gowri Devi

Department Psychiatry, Asha Hospital, Hyderabad, Telangana, India

Received: 19 March 2020

Revised: 30 June 2020

Accepted: 06 July 2020

***Correspondence:**

Dr. Tejas D. Gayal,

E-mail: tejas.gayal@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Hematohidrosis is a very rare yet fascinating clinical entity in which blood is excreted in sweat under extreme physical or emotional stress. The causes can be attributed to variety of etiological factors such as systemic disorders, vicarious menstruation, excessive exertion, and psychogenic and idiopathic causes. Although the episodes are usually self-limiting and do not affect the health status of the patient, the very phenomenon can be quite scary for the patient and family members. Amongst the psychogenic causes, various mental illnesses can result in Hematohidrosis, but it is more commonly reported so far with anxiety spectrum illnesses and depression. The distinctive feature of the case presented by authors is its association with Hematohidrosis and its symptoms of Paranoid Schizophrenia. Objective of this study the association between symptomatology of Paranoid Schizophrenia and its effect on Hematohidrosis After due consent from the patient, relatives and permission from the ethics committee of the institution, clinical history was obtained from the patient interviews. The case was followed longitudinally on each follow up. Appropriate blood investigations were done. Information obtained was compiled to form a case report. The improvement in psychotic symptoms corresponded with reduced frequency of bleeding episodes. As anti-psychotic treatment was initiated, patient started showing improvement in psychotic symptoms. This co-occurred with the reduced severity and frequency of Hematohidrosis. Improvement in anxiety associated with psychotic symptoms was most probably responsible for improvement in symptoms of Hematohidrosis.

Keywords: Blood, Hematohidrosis, Paranoid Schizophrenia, Sweat

INTRODUCTION

Hematohidrosis is a very rare yet fascinating clinical entity in which blood is excreted in sweat under extreme physical or emotional stress.

The causes can be attributed to variety of etiological factors such as systemic disorders, vicarious menstruation, excessive exertion, and psychogenic and idiopathic causes.¹ Although the episodes are usually self-limiting and do not affect the health status of the patient, the very phenomenon can be quite scary for the patient and family members.² The distinctive feature of the case presented by authors is its association with schizophrenia and its symptoms.

CASE REPORT

A 27 year old Hindu lady hailing from rural area in Telangana state presented to us with history of suspiciousness, hearing voices while being alone and fear that she's going to be harmed by her neighbors since last 5 years and episodic bleeding through various areas on her body since last 6 months. She was apparently alright 5 years ago, when she initially started being withdrawn and aloof. She wouldn't talk to her husband and her family members like her previous self. Later she would get irritable without any provocation. Over a period she started being suspicious; she would believe that people think she is involved in illicit relationships with multiple men. Gradually family members noticed she was

muttering and talking to self. When asked, she mentioned that she hears voices of her neighbors while being alone in the house and she replies to them. She appeared to be preoccupied with her suspicions and the voices which she heard most of the time in the day. She would often lock herself in the room and started avoiding her household chores. Over a period of time, she started neglecting her hygiene and her self-care. Since last six months, she started feeling extremely anxious when she would hear voices and would say the content of the voices was derogatory and threatening. She would experience restlessness, chest tightness and excessive sweating when she heard the voices. This anxiety was accompanied by episodes of bleeding from multiple sites such as -face, eyes, ears, nose, area around lips, umbilicus, scalp, vagina and area around her nipples. The episodes varied in frequency; they would range from as high as 10-15 times in a day to once or twice a day depending on the frequency and intensity of psychotic symptoms she experienced.

Patient did not have a history suggestive of any major medical, surgical or dermatological disorders in the past.

While she was undergoing treatment, her spouse noticed that both their sons (Aged 10 and 8 years) started bleeding from multiple areas (similar distribution as mothers) on the body externally. Onset of symptoms for both the sons was within a short span of each other. They would bleed scantily compared to their mother. Interestingly, bleeding episodes would occur only when mother has bleeding episodes. The patient initially consulted a general physician 5 months back and was given some oral medications but it did not relieve the patient's symptoms. She was referred to us by the physician later which was her first psychiatric consultation.

She underwent a thorough dermatological and hematological evaluation by dermatologist who confirmed the diagnosis of Hematohidrosis, with no other medical disorders.

Patient was admitted; the episodes of bleeding were observed and documented. She was started on Tab Amisulpride, Tab Trihexyphenidyl, Tab Clonazepam and Tab Propranolol. Doses of the medications were titrated considering the tolerability and response. She was assessed on daily basis for improvement in bleeding episodes and in psychotic symptoms in the in-patient ward. Gradually patient started showing improvement in her behavior and in delusions and hallucinations. The improvement in psychotic symptoms corresponded with reduced frequency of bleeding episodes. She was discharged after 10 days of hospital stay after significant improvement in her presenting complaints. On following up regularly, by the 2nd month after discharge, patient was nearly asymptomatic in terms of symptoms of Hematohidrosis and Schizophrenia; she also showed significant improvement in terms of social, occupational functioning.

DISCUSSION

Hematohidrosis is an uncommon disease characterized by spontaneous discharge of "blood sweat" through intact skin. Various causes have been proposed, including systemic diseases, such as vicarious menses and coagulopathies (albeit historically reported in malaria, scurvy and epilepsy), exertion and psychogenic disorders, in which bleeding might be the result of exacerbated sympathetic nervous system activation.¹

Pathogenesis

In Hematohidrosis there is a spontaneous painless bleeding through unbroken skin in any part of the body. It is a condition in which capillary blood vessels that feed the sweat glands rupture, hence causing them to exude blood. As the blood exudes via the follicular canals, it is been also called as hematofolliculohidrosis.²

Around the sweat glands, there are multiple blood vessels in a net-like form, which constrict under the pressure of great stress; as the anxiety increases, the blood vessels dilate to the point of rupture, hence leading to passage of blood into the sweat glands (Figure 1).

The sweat glands eventually propel the blood and sweat to the surface, which comes out as droplets of blood mixed with sweat. It may occur in any area of unbroken skin anywhere in the body and may be unilateral, bilateral or symmetrical. It may be limited to a specific area or generalized.² In present case, patient had multiple areas from where bleeding occurred through sweat. It was not localized to one region.



Figure 1: Bleeding sites.

Hematohidrosis in psychiatric illness

It has been reported in association with acute and chronic stress, severe anxiety with panic attacks, depressive episode, Oppositional defiant disorder, Intellectual disability. Co-morbidity with Psychotic illnesses hasn't been reported commonly in the available literature so far. This condition is specifically known to occur under extreme physical or emotional stress. It may present as

alone or as a co-morbid condition. Among the reported cases there seems to be no age predilection. It seems to be more common in females in the literature available so far. It has been reported in children as small as 8 yrs and in an elderly 72 yrs old male. Acute fear and intense psychological stress has been considered as the most frequent cause. It has been reported in men condemned to execution, in a person who feared storm while sailing, in a lady who had fear of being raped, in a 12 yr old child who witnessed violent crime of beheading.^{2,3} Thus the association between bleeding episodes and severe anxiety has been reported so far. In the present case, the anxiety caused by psychotic symptoms, i.e. delusions and hallucinations seemed to be responsible for Hematohidrosis.

Hematohidrosis itself is a self-limiting in nature and carries a good prognosis. Despite which, it is important to note the meaning patient ascribes to the symptoms. Patient in the present case was extremely distressed by the bleeding episodes, to the extent of contemplating and attempting self-harm. Thus educating about the benign course of illness thus forms an important part of management.

Many cases were studied and classified into categories by according to the causative factor. The major causes were- component of systemic disease, vicarious menstruation, excessive exertion, psychogenic factors and unknown factors. The psychogenic factors were further subdivided into (a) those that occurred only once and (b) those that recurred. Acute fear and intense mental contemplation were found to be the most frequent contributions amongst the inciting causes.⁴

Treatment

Guidelines for Hematohidrosis aren't clearly laid yet. Management of the underlying cause and addressing the anxiety in cases of psychogenic Hematohidrosis forms the mainstay of treatment. Propranolol, Atropine sulfate patches, Lorazepam, Diazepam are the available treatment options. Reports of successful treatment with beta blockers with a significant reduction in the frequency of spontaneous bleeding are described in the medical literature.^{3,4} In a 72 yr old patient with depression, it has been reported that Hematohidrosis resolved with psychotherapy for underlying depression.² A case of Hematohidrosis and Oppositional defiant disorder has been reported to have resolved with combination of propranolol and lorazepam. Patient in the present case responded well to oral Anti-psychotics

(Amisulpiride) and Anxiolytics (Clonazepam and Propranolol) which alleviated patient's delusions and hallucinations and thereby reduced the anxiety. Patient stopped having bleeding episodes as she showed improvements in symptoms of Hematohidrosis.

Rarity of this condition and co-occurrence with psychotic disorders might prompt clinicians to suspect factitious disorder in certain situations.⁵ Being aware of this rare condition would prevent such pitfalls in diagnosis. The rarity of this case report is the association of Hematohidrosis and Paranoid Schizophrenia in Indian scenario.^{6,7} Insight into the management guidelines can help fellow clinicians encountering similar patients and will also pave the way for future research.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not Required

REFERENCES

1. Tshifularo M. Blood otorrhea: blood stained sweaty ear discharges: Hematohidrosis; four case series (2001-2013). *Am J Otolaryngol.* 2014 Mar-Apr;35(2):271-3.
2. Jerajani HR, Jaju B, Phiske MM, Lade N. Hematohidrosis - a rare clinical phenomenon. *Indian J Dermatol.* 2009 Jul;54(3):290-2.
3. Holoubek JE, Holoubek AB. Blood, sweat and fear. A classification of hematidrosis. *J Med.* 1996;27(3-4):115-33.
4. Patel RM, Mahajan S. Hematohidrosis: A rare clinical entity. *Indian Dermatol Online J.* 2010;1(1):30-2.
5. Biswas S, Surana T, De A, Nag F. A Curious Case of Sweating Blood. *Indian J Dermatol.* 2013;58(6):478-80.
6. Bhagwat PV, Tophakhane RS, Rathod RM, Shashikumar BM, Naidu V. Hematohidrosis. *Indian J Dermatol Venereol Leprol.* 2009 May-Jun;75(3):317-8.
7. Maglie R, Caproni M. A case of blood sweating: Hematohidrosis syndrome. *CMAJ.* 2017 Oct 23;189(42):E1314.

Cite this article as: Gayal TD, Devi MG. A rare case of hematohidrosis in a patient with paranoid schizophrenia. *Int J Res Med Sci* 2020;8:3085-7.