International Journal of Pharmacy and Pharmaceutical Sciences

Print ISSN: 2656-0097 | Online ISSN: 0975-1491 Vol 15,

Case Study

HEMATOHIDROSIS-A RARE BLEEDING PHENOMENON

GUNA GOURU*, B. SNEHA, T. S. DURGA PRASAD

Department of Pharmacy Practice, Sri Padmavathi School of Pharmacy, Tirupati-517503, Andhra Pradesh, India
Email: gouru.guna@gmail.com

Received: 28 May 2023, Revised and Accepted: 30 Jun 2023

ABSTRACT

Hematohidrosis is a rare clinical condition in which an individual sweats blood. Even though there are several causes, such as systemic diseases, vicarious menstruation, extreme physical activity, psychogenic reasons, and idiopathic causes, acute fear and intensive mental pondering are the most frequent. Bloody perspiration, bloody tears (Hemoclaria), bleeding from the nose, bleeding from the ears (Otorrhoea), and leaking blood from various skin surfaces are all indications and symptoms of this condition. Here, we present a case of hematohidrosis in a 9y old female child with bleeding for two months from her forehead, nose, ear, and vagina, who responded to propranolol.

Keywords: Hematohidrosis, Mental pondering, Bloody perspiration, Hemoclaria, Otorrhoea

DOI: https://dx.doi.org/10.22159/ijpps.2023v15i8.48552. Journal homepage: https://innovareacademics.in/journals/index.php/ijpps.

INTRODUCTION

Hematohidrosis is a rare clinical condition in which an individual sweats blood. It manifests as erratic, repeated bouts of spontaneous and self-limited blood flow from the intact skin and is linked to several etiological causes, including systemic diseases, vicarious menstruation, extreme physical activity, psychogenic reasons, and idiopathic causes [1-3]. Even though there are several causes, acute fear and intensive mental pondering are the most frequent [4]. Manonukal *et al.* coined the name "Hematofolliculohidrosis" since it occurred with sweat-like fluid and blood exerted via follicular canals [4, 5]. It is hypothesized that sympathetic hyperactivity causes cutaneous vasoconstriction during nerve stress, followed by rebound vasodilation and rupture into the sweat glands, resulting in the mixing of blood with perspiration [6]. Bloody perspiration, bloody tears (Hemoclaria), bleeding from the nose, bleeding from the ears (Otorrhoea), and leaking blood from various skin surfaces are all indications and symptoms of this condition [7]. It is clinically proven by biochemical and microscopic analysis of fluid; nevertheless, no specific studies have been conducted or a treatment plan established for this ailment, necessitating therapeutic and psychological understanding.

CASE REPORT

A 9 y-old female child who had been bleeding for two months from her forehead, nose, ear, and vagina was brought by her parents to the paediatric outpatient department. Two months ago, the child experienced 4 d* of vaginal bleeding that lasted for a few minutes each day, barely stained the pad, and eventually stopped on its own (fig. 1). Child had bleeding from the nose for 3 d*, initially from the left nostril and lasting for a few minutes, then bilaterally, bleeding from the ear for 4 d*, also lasting for a few minutes, and bleeding from the forehead for 3 d* lasting for a few minutes (fig. 2, 3, 4). No prior drug use was known to have occurred. Although there was a history of headaches, there was no evidence of previous trauma. Hematemesis, melena, joint and muscle aches, fever, nose picking, cold, cough, or abdominal pains are not past occurrences. There is no history of bleeding disorders in the child's family. The child has a history of nightmares and exhibits signs of separation anxiety because her parents had a marital disharmony and live separately.

Fig. 1: Oozing of blood from the vaginal region, barely staining the pad

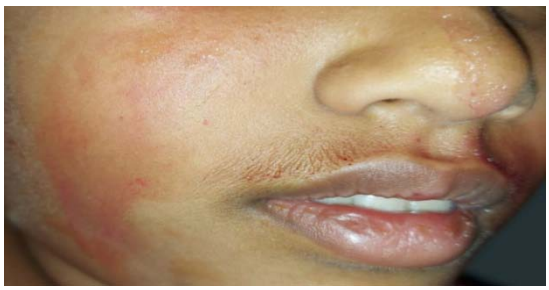

Fig. 2: Bleeding from nostrils bilaterally

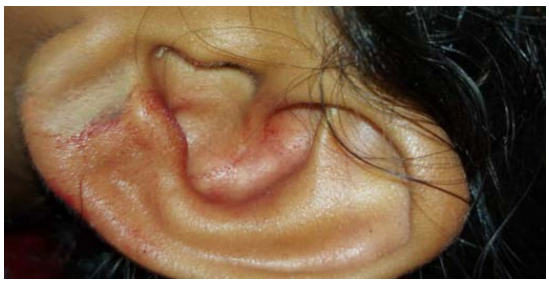

Fig. 3: Bleeding from the ear

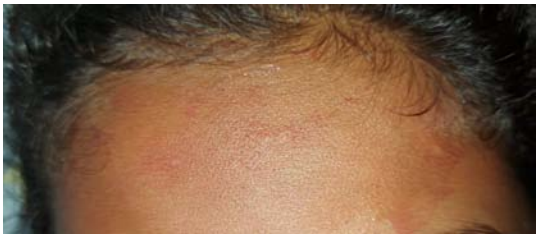

Fig. 4: Bleeding from the forehead

The child appears to be conscious, coherent, and cooperative. The child had obesity, according to anthropometry. Except for a slight pallor, vital signs were stable. A systemic assessment was typical. A complete blood count of the blood sample, as determined by laboratory analysis, showed that the haemoglobin level was 12 g/dl, the platelet count was 3.96 lakhs, the total leukocyte count was 7800/µl and the smear was normal. Numerous RBCs were visible in the secretions after microscopic analysis. Prothrombin time was 13.26 seconds, activated partial thromboplastin time was 22.48 seconds, and the international normalized ratio was 1 second, according to the coagulation profile. There was no evidence of a factor deficiency, and the kidneys, liver, and urine clot lysis tests all came back normal. Bone age and chronological age are correlated. Apart from the laboratory findings, the child has displayed some unusual behaviour, as seen by her suspicious and repeated drawings during the psychological therapy (fig. 5). The artwork demonstrates that the child draws recurrent images of herself with her parents and her sibling standing apart from her and their parents. The child's odd behaviour was treated with counselling and behavioural therapy. The child was prescribed propranolol and clonazepam, which improved her condition significantly.

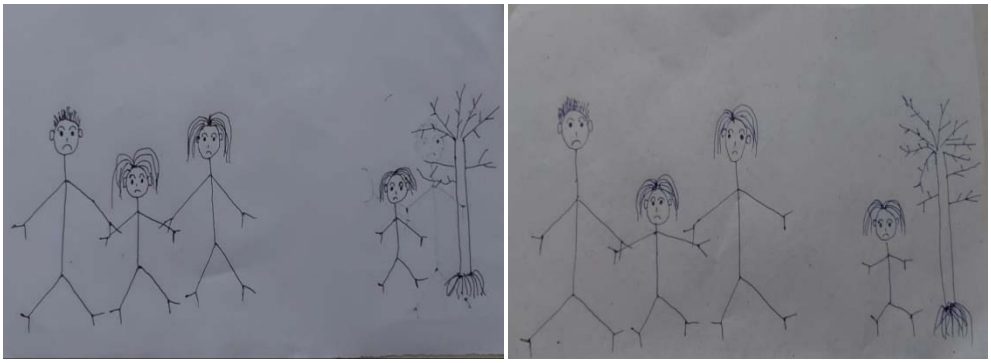

Fig. 5: Child's suspicious and recurrent drawings

DISCUSSION

Hematohidrosis, also known as Hematidrosis, Hemidrosis, or Hematofolliculohidrosis, is a mysterious illness characterized by erratic, repeated bouts of spontaneous and self-limited blood flow from the intact skin. It can occur in any portion of the body and at many sites at the same time and is linked to several etiological causes, including systemic diseases, vicarious menstruation, extreme physical activity, psychogenic reasons, and idiopathic causes [1-3, 8]. Even though there are several causes, acute fear and intensive mental pondering are the most frequent [8]. In this case, the probable cause for hematohidrosis was anxiety and chronic stress.

According to one hypothesis, while under stress, a collection of blood vessels near the sweat glands constricts. As anxiety levels rise, blood vessels enlarge to the point where they burst. Blood enters the sweat glands nearby, which push it up to the surface where it appears as droplets of blood mixed with perspiration, leading to mild to severe dehydration from loss of both sweat and blood [3]. Another hypothesis suggests that sympathetic hyperactivity invokes a stress-fight-or-flight reaction to such a degree, leading to cutaneous vasoconstriction followed by rebound vasodilation and rupture into the sweat glands, resulting in the mixing of blood with perspiration [3, 6].

Hematohidrosis is proven when all the diagnostic criteria are met. It includes i) A confirmed recurrent, spontaneous, self-limiting oozing blood discharge witnessed by health care professionals. ii) Presence of numerous blood components appeared in microscopic analysis of the secretions. iii) the bleeding site remains intact, with no abrasion [8]. In addition, the Benzidine test is a laboratory confirmation test for the presence of blood in perspiration. The blood haemoglobin combines with hydrogen peroxide to release oxygen and produce compounds that range in hue from green to blue [9].

Successful treatment of this condition is achieved by the administration of beta blockers, anxiolytics, and anti-depressants [2, 9]. In addition, psychological therapy is also provided to treat the symptoms associated with the disease. In this child, remission was achieved by administering propranolol (beta blocker), clonazepam, supportive psychotherapy, family education, and better child-rearing practices.

CONCLUSION

Even though there are several causes, anxiety and chronic stress have been the major contributory factor in the present case, which manifests in different forms, both physically and psychologically. Early recovery is made possible by psychiatric treatment, which also emphasizes the connection between psychogenic causes and Hematohidrosis.

FUNDING

Nil

AUTHORS CONTRIBUTIONS

All the authors had full access to the data. Guna Gouru: Writing, reviewing, and editing the original draft and final version of the manuscript. B. Sneha: Case Collection, documentation, and review of the manuscript. Dr. T. S Durgaprasad: Review of the manuscript.

CONFLICT OF INTERESTS

None

REFERENCES

1. Arakkal GK, Poojari S, Netha GR, Kumar BU. Hematohidrosis: a rare case of a female child who sweat blood. Indian J Paediatr Dermatol. 2017 Oct-Dec;18(4):327-9. doi: 10.4103/2319-7250.193031.
2. Zohni AG. Hematidrosis of the auricle: a case report. Academia Letters. 2021:1-4. doi: 10.20935/AL2034.
3. Jerajani HR, Jaju B, Phiske MM, Lade N. Hematohidrosis–a rare clinical phenomenon. Indian J Dermatol. 2009;54(3):290-2. doi: 10.4103/0019-5154.55645, PMID 20161867.
4. Deshpande M, Indla V, Kumar V, Reddy IR. Child who presented with hematohidrosis (sweating blood) with the oppositional

defiant disorder. Indian J Psychiatry. 2014 Jul-Sep;56(3):289-91. doi: 10.4103/0019-5545.140649, PMID 25316941.

5. Manonukul J, Wisuthsarewong W, Chantorn R, Vongirad A, Omeapinyan P. Hematidrosis: a pathologic process or stigmata. A case report with comprehensive histopathologic and immunoperoxidase studies. Am J Dermatopathol. 2008 Apr;30(2):135-9. doi: 10.1097/DAD.0b013e318164cf4b, PMID 18360116.
6. Das D, Kumari P, Poddar A, Laha T. Bleeding to life: a case series of hematohidrosis and hemolacria. Indian J Pediatr. 2020 Jan;87(1):84. doi: 10.1007/s12098-019-03075-3, PMID 31529380.
7. The disease-genetic and rare diseases information center. Available from: https://rarediseases.info.nih.hematohidrosis-about.gov/diseases/13131/hematohidrosis.
8. Ferdous A, Islam F, Zahangir TL. Hematohidrosis: a mysterious and rare disorder. Arch NIMH. Nov 2020;3(2):40-2.
9. Jayaraman AR, Kannan P, Jayanthini V. An interesting case report of hematohidrosis. Indian J Psychol Med. 2017 Jan-Feb;39(1):83-5. doi: 10.4103/0253-7176.198953, PMID 28250564.