Niger J Paed 2015; 42 (1): 68 –70

CASE REPORT

Oyenusi EE
Ananti CH

Haemolacria (bloody tears): A perplexing symptom: A report of two cases

DOI:http://dx.doi.org/10.4314/njp.v42i1,15

Accepted: 6th August 2014

Oyenusi EE (✉)
Department of Paediatrics,
Lagos University Teaching Hospital,
Idi-Araba, Lagos
Email: ebikike@yahoo.com

Ananti CH
Motayo Hospital Limited,
3 Owodunni Street, Ikeja, Lagos

Abstract: We present two cases of a boy and a girl (both aged four years) who presented with bloody tears. (haemolacria). The boy initially presented with cough, catarrh and three episodes of epistaxis. Full blood count, coagulation profile, bleeding time, blood film picture and X-ray of the postnasal space were normal. He started shedding blood stained tears initially on crying, two weeks later without associated epistaxis. Subsequently the bloody tearing became spontaneous. He was given intramuscular vitamin K and high dose vitamin C. Other relevant investigations to determine the cause could not be done due to financial constraints, however the bloody tearing stopped after two months and has not recurred after being followed up for two years.
The second patient, presented with redness of the eyes and yellowish mucoid discharge of six days, low-grade fever of three days and spontaneous bloody tears from both eyes. There was associated orbital cellulitis and vomiting of non-bloody recently ingested feeds. Blood investigations were suggestive of sepsis and assays of measured clotting factors and coagulation profile were normal. She was managed with antibiotics and improved with resolution of haemolacria which has not recurred during a follow up period of six months.

Key words: Bloody tears, haemolacria, children.

Introduction

Haemolacria (bloody tears) is a rare occurrence. This rarity is alluded to in a local Nigerian (Ibo) proverb which when translated means "there is nothing that the eye sees and cries blood, it can only cry water". However when haemolacria occurs, it may be a cause of panic for the patient or care givers and may perplex the doctor. It was first described by Dodanaeus[1] in 1581where he recorded his observations on a girl who, at the age of 16, had not menstruated. Haemolacria can be caused by diseases of the conjunctiva, eyelids and nasolacrimal system or trauma[2]. Epistaxis with retrograde flow, vascular malformations, inherited bleeding disorders, acquired systemic coagulopathies, vicarious menstruation, drugs, hyperthyroidism, nasolacrimal tuberculosis, hysteria/stigmatization and malingering have also been implicated[3-9]. Haemolacria can also be idiopathic[2].
We report these two cases to draw attention of clinicians to this unusual condition and highlight management challenges.

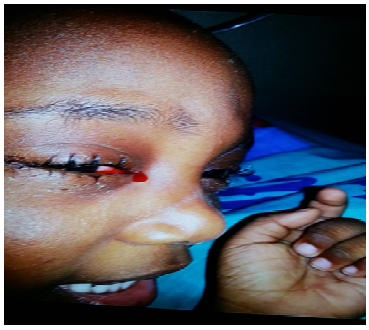
Case presentation

Case 1

TA, a four-year old boy initially presented in a private hospital with cough, catarrh and three episodes of epistaxis. There was no history of trauma, no previous bleeding episodes nor a family history of bleeding disorders. He was placed on *Otrivin*® nasal drops, *Actifed*®, Cefuroxime, and a stat dose of diacynone. Full blood count, coagulation profile, bleeding time, blood film picture and X-ray of the postnasal space were normal. He started shedding blood–stained tears initially on crying, two weeks later without associated epistaxis. Subsequently the bloody tearing became spontaneous. The eyes were grossly normal. Assays for Factors VIII, IX and Von Willebrand factor, a nasolacrimal irrigation and biopsy, CT Scan and/or MRI of the head and orbit were planned for but the health insurance did not cover the expenses and the parents had financial constraints. He was given empirical therapy of IM Vitamin K for three days and placed on high dose Vitamin C (500mg daily)[6]. Two months later, the bloody tearing stopped spontaneously and he has been stable for about 18 months.

Case 2

SA, a four year old female, presented in the above private hospital (about a year after Case 1) with redness of the eyes and yellowish mucoid discharge of six days, low-grade fever of three days and spontaneous bloody tears from both eyes. There was associated gradual painful swelling of the eyes which occluded the right eye and also impaired her vision. There was associated projectile vomiting, which was neither blood-stained nor bilious but contained recently ingested feeds. There was no bleeding from any other body orifice. However there was a history of frequent uncontrollable flow of tears without any emotional involvement since birth. On examination, she was acutely ill looking, febrile (temperature of 38.2°C) and had bilateral hyperaemic swollen eyes with yellowish discharge and intermittent shedding of bloody tears. Full blood count was suggestive of sepsis. Coagulation profile and eye swab microscopy were normal while culture yielded no growth. She was commenced on intravenous antibiotics (Augmentin and Gentamicin) and chloramphenicol eye drops. Factors VIII and IX assays were normal. CT scan of both eyes and lacrimal gland biopsy were planned after review by the ophthalmologist though not eventually done due to financial constraints. The child improved with resolution of symptoms. She is being followed up and has not had any bloody tears for six months.



Discussion

Different isolated cases of haemolacria are reported in literature. All age groups can be affected from infancy to the elderly which would as expected be related to the causative factors. There is no obvious sex preponderance except where the primary disease has a gender bias such as hyperthyroidism[7] or hysteria[8]. Coincidentally, our patients were both four years old at presentation but a male and a female respectively.

Some reports have documented haemolacria accompanying epistaxis[3,4]as was seen initially in our first patient. The anatomical basis of this occurrence lies in the intimate connection of nose and eye via the lacrimal apparatus[4]. An increase in pressure within the nasal cavity during epistaxis can cause retrograde flow of blood through the system and thus lead to bloody tears emerging from the ipsilateral eye[4]. Other reports of bloody tears in early childhood include Scott,[2] who described a 6-month-old girl with an upper respiratory infection and blood-stained tears upon crying vigorously which subsided simultaneously with the clearing of the infection. A similar scenario was seen in our second patient whose bloody tearing resolved with recovery from the infective episode.

Ho et al[2] also documented spontaneous bloody tearing in a case series comprising a six-year old boy and three girls (two aged 12 years and one 14 years) over an 11-year period. These patients had extensive work which failed to suggest a cause. The bloody tearing eventually resolved in all these patients without further sequel nor recurrence over a follow-up period of 9 months to 11 years[2].

Evaluation and management of haemolacria is multidisciplinary. A thorough history, a careful eye examination and an otolaryngologic examination are essential[3]. Extensive workup is also required to establish a diagnosis. When one is suspicious about the nature of the red material such as suspected hysteria and malingering, microscopy and tests to detect and analyze blood are worthwhile[8].

Treatment is guided by the aetiology. These may include administration of antibiotics, correction of a bleeding diathesis, tumor removal, hormonal therapy, antituberculous drugs, anti-thyroid medications or psychotherapy[3-5,7-9]. High dose vitamin C has been postulated to be effective in bloody tearing caused by chronic inflammatory conditions[6]. In our first patient, it is not easy to attribute resolution of haemolacria entirely to Vitamin C therapy. Close observation with reassurance is needed in idiopathic cases as most will resolve spontaneously. Counseling and psychological support for patients and family is useful in helping the family to cope with possible discrimination and stigmatization especially in superstitious settings.

Conclusion

In conclusion, haemolacria is an uncommon but worrisome clinical phenomenon. Management involves a multidisciplinary approach. Financial constraints may constitute a challenge in full evaluation and management in resource-constrained settings. Follow up of patients is recommended.

Authors Contributors
OEE : managed the first case
ACH : managed the second case. Both authors wrote and reviewed the manuscript.
Conflict of interest: None
Funding: None

Acknowledgements

The authors wish to thank the parents of the patients for their consent to use the information and photographs. We also appreciate the Management of Motayo Hospital Limited for permission to use their patients' information.

References

1. Dodonaeus R. De Lachrymis sanguineis. In: Medicinalium Observationum exempla rara, Coloniae. 1581.
2. Ho VH, Wilson MV, Linder JS, Fleming JC, Haik BG. Bloody tears of unknown cause: case series and review of the literature. *Ophthal Plast Reconstr Surg 2004; 20(6): 442-7.*
3. Wiese MF .Bloody tears, and more! An unusual case of epistaxis. *Br J Ophthalmol 2003; 87:1051.*
4. Scott ZR. Sanguineous lacrimation *AMA J Dis Child 1927; 33: 907-9.*
5. Awan S, Kazmi HS, Awan AS.An unusual case of bloody tears. *J Ayub Med Coll Abbottabad 2006;18:68-9.*
6. Karslioglu S, Şimşek IB, Akbaba M. A case of recurrent bloody tears. *Clinical Ophthalmology 2011:5 1067–9.*
7. Ho JZS, de Silva J, Olver J. A very rare case of bloody tears with enigmatic epistaxis and haematuria. *Orbit 2011; 30:116-7.*
8. Ahluwalia BK, Khurana AK, Sood S. Bloody tears (haemolacria). *Indian J Ophthalmol 1987;35:41-3.*
9. Jablenska L, Lo S, Uddin J, Toma A.Nasolacrimal tuberculosis: case report highlighting the need for imaging in identifying and managing it effectively. *Orbit 2010;29:126-8.*