Achenbach Syndrome: A Rare Case of Paroxysmal Finger Hematoma

Dear Editor,

Paroxysmal finger hematoma or Achenbach syndrome refers to an acute-onset bluish discoloration involving few fingers usually, although it can involve the palms or dorsum of hands.^[1,2] It may be asymptomatic, but is more commonly associated with paresthesia or pain. Rupture of superficial veins and consequent hemorrhage is often the cause of the signs and symptoms of the disease.^[2] The exact etiology is unknown; however, twisting or gripping movement has been commonly associated with paroxysmal finger hematoma suggestive of Achenbach syndrome.

A 54-year-old man presented with sudden-onset bluish discoloration noted over the tip of his left middle and ring fingers. It was noticed over both the dorsal and palmar aspects of left hand after trying to fix a screw forcefully and was associated with excruciating pain and paresthesia over the region. The patient denied any previous trauma, was a nonsmoker, and not on any oral drugs including anticoagulants. The patient denied having similar episodes in the past. His past medical and surgical history was insignificant.

On examination, there was distinctive but ill-defined discoloration of the tips of left middle and ring finger noticed on the digital pulp as well as nail beds [Figure 1a and b]. The digits were exquisitely tender with tenderness extending to the dorsum of left hand accompanied by phlebectasia. All the extremities were warm and all peripheral pulses were palpable and of good volume. A detailed systemic and cutaneous examination revealed no other abnormality. Laboratory investigations showed a normal hematological, biochemical, and coagulation profile and an ultrasound Doppler study of the left upper limb was normal.

Based on the history, clinical examination, and laboratory investigations, a diagnosis of paroxysmal finger hematoma was made and the patient was counselled regarding the self-resolving nature of the disease. The pain and discoloration subsided over the next 1 week with symptomatic treatment (cold compresses and oral ibuprofen 400 mg three times daily).

Paroxysmal finger hematoma/finger apoplexia is also known as Achenbach syndrome after the German physician who first described it.^[1] It is a rare disease with very few cases being reported in the literature. It presents as acute-onset bluish discoloration of one or more fingers and/or palms and is most frequently associated with pain followed by edema and paresthesia.^[2] A preceding history of trauma can be present in up to 30% of individuals.^[2] The acute presentation causes worry and anxiety both in the



Figure 1: Bluish discoloration involving the palmar (a) and dorsal aspects with phlebectasia (b) of the middle and ring finger in a male patient

patient and the caregiver; hence, an awareness about this condition is important to allay fear and avoid unnecessary investigations. Nevertheless, an acute presentation lends this entity to many close differential diagnoses which can usually be excluded clinically. These are summarized in Table 1, with salient differentiating points. This is important as a diagnosis of Achenbach syndrome is mainly based on clinical assessment. Our patient presented with acute onset bluish discoloration and pain with paresthesia over left middle and ring finger, with phlebectasia over the dorsum of left hand. There was a significant improvement of symptoms and swelling at the end of seven 4 days, even with conservative management, thus confirming the diagnosis.

In conclusion, Achenbach syndrome is a rare presentation with paroxysmal bruising of fingers, which may be associated with pain and paresthesias. Spontaneous resolution over days is the rule and hence reassurance and symptomatic management is sufficient in most cases. This report serves to highlight the common differentials to be considered as well as the benign nature of the disease. It will help to raise awareness about this uncommon entity, so as to help avoid unnecessary time consuming and expensive investigations.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Vishal Gaurav, Chander Grover

Department of Dermatology, University College of Medical Sciences and Guru Teg Bahadur Hospital, Dilshad Garden, Delhi, India

Table 1: Differential diagnosis of blue finger(s)								
Disease entity	Achenbach syndrome ^[3]	Acute limb ischemia ^[4]	Thromboangitis obliterans ^[5]	Perniosis ^[6]	Raynaud's phenomenon ^[7]	Acrocyanosis ^[8]	Psychogenic purpura ^[9]	
Sex predominance	Females	Males	Males	Females	Females	Females	Females	
Peripheral temperature	Normal	Cold	Cold	Cold	Cold	Cold	Normal	
Age at presentation	<60 years	Any age	<40 years	Any age	<40 years	Adolescence	Middle aged females	
No of fingers involved	Isolated 1 or 2 finger	All fingers of one hand	1-2 fingers	Multiple fingers	All fingers and toes	All fingers and toes	Few fingers	
Peripheral pulses	Normal	Absent/ Diminished	Absent/ Diminished	Normal	Normal	Normal	Normal	
Digital gangrene	No	Can occur	Can occur	No/Ulceration may occur	No/Ulceration may occur	No	No	
Pain	Present	Present	Present	Present with itching	Can be painful	Painless	Painful	
Time to resolution	Few days to a week	Depends on quick and efficient surgical intervention	Depends on quick and efficient surgical intervention	Resolves in summers or with intervention	Resolves in summer or hot environment	Commonly improves, but may persist	Resolves with psychotherapy and/ or psychopharma- cotherapy	
Nature of symptoms	Transient, without recurrence	Transient without recurrence	Causes permanent disablement	Transient	Transient with recurrence	Persistent	Transient	
Skin changes	Bluish discoloration	Bluish discoloration	Red or cyanotic periphery, ulcers, gangrene	Red-purple papules or nodules	Sequential color change White \rightarrow blue \rightarrow red	Erythrocyanotic mottled discoloration	Spontaneously appearing ecchymoses	
Precipitating factors/Associated diseases	None	Arterial embolism	Smoking	Lupus erythematosus, Hematologic malignancies	Autoimmune connective tissue disorders or malignancy	Autoimmune connective tissue disorders or malignancy	Psychiatric disorders e.g., depression, anxiety, obsessive- compulsive disorders	

Address for correspondence:

Dr. Chander Grover, Department of Dermatology and STD, UCMS and GTB Hospital, Dilshad Garden, Delhi - 110 095, India. E-mail: chandergroverkubba@rediffmail.com

References

- Achenbach W. Das paroxysmale Handhämatom. Medizinische 1. 1958:52:2138-40.
- 2. Kordzadeh A, Caine PL, Jonas A, Rhodes KM, Panayiotopolous YP. Is Achenbach's syndrome a surgical emergency? A systematic review. Eur J Trauma Emerg Surg 2016;42:439-43.
- 3. Ada F, Kasimzade F. Analysis of 24 patients with Achenbach's syndrome. World J Clin Cases 2019;7:1103-10.
- 4. Olinic DM, Stanek A, Tătaru DA, Homorodean C, Olinic M. Acute limb ischemia: An update on diagnosis and management. J Clin Med 2019;8:1215-26.
- Olin JW, Shih A. Thromboangiitis obliterans (Buerger's disease). 5. Curr Opin Rheumatol 2006;18:18-24.
- 6. Baker JS, Miranpuri S. Perniosis a case report with literature review. J Am Podiatr Med Assoc 2016;106:138-40.
- Temprano KK. A review of Raynaud's disease. Mo Med 7. 2016;113:123-6.
- 8. Das S, Maiti A. Acrocyanosis: An overview. Indian J Dermatol 2013;58:417-20.

Vivekanandh K, Dash G, Mohanty P. Gardner diamond 9. syndrome: A psychogenic purpura. Indian Dermatol Online J 2017;8:521-2.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
	Quick Response Code
Website: www.idoj.in	
DOI: 10.4103/idoj.IDOJ_822_20	

How to cite this article: Gaurav V, Grover C. Achenbach syndrome: A rare case of paroxysmal finger hematoma. Indian Dermatol Online J 2021;12:774-5.

Received: 21-Nov-2020. Revised: 06-Mar-2021. Accepted: 15-Apr-2021. Published: 02-Aug-2021.

© 2021 Indian Dermatology Online Journal | Published by Wolters Kluwer - Medknow