A Case of the Blue Finger – Achenbach Syndrome

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ABSTRACT

Achenbach Syndrome is a self-limiting, benign condition that causes paroxysmal atraumatic hematomas in the volar aspects of fingers.[1] It may be associated with burning, swelling, numbness, painful movement of hand joints, or a tingling sensation, often resembling serious vascular diseases that leads to extensive diagnostic testing. Despite the sometimes intriguing clinical picture, Achenbach Syndrome is self-resolving, and does not require diagnostic testing or treatment. We describe a case of Achenbach syndrome in a 77- year-old patient.

KEYWORDS: Achenbach, finger hematoma

INTRODUCTION

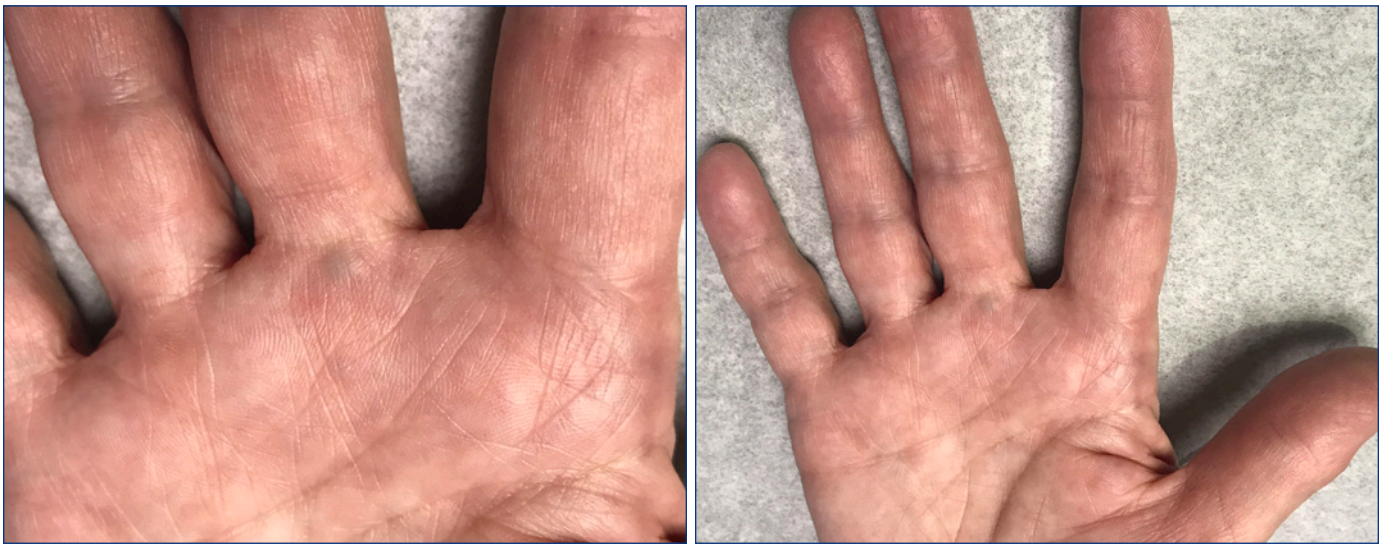
Being an uncommon condition, Achenbach Syndrome's prevalence in the medical literature is scarce. It is, however, important to recognize the syndrome, as it has a vast differential diagnosis, many of which are conditions requiring extensive work-up. This case aims to add to the existing literature, illustrating the self-resolving nature of the syndrome and highlighting the importance of preventing unnecessary testing.

CASE REPORT

A 77-year-old patient with a past medical history of hypertension, osteoporosis and hypothyroidism presented to the clinic with a 15-year history of recurring multiple swellings on the palmar aspect of her fingers, sparing her thumbs. She presented now because these symptoms have increased in frequency and duration over the past year. These swellings last 4–6 weeks, and are followed by severe pain in the involved digits for 1 day, and subsequent bluish, localized discoloration of the area for 2–5 days. When present, the pain is severe, and only occurs when the patient flexes her digit or with pressure, but not at rest. Additionally, the patient reported that the pain leads to difficulty with movement of the fingers. She reported that nothing has helped to relieve these symptoms. She also states that exposing her fingers to cold temperature has had no effect on her symptoms. She denied trauma to her hands.

Her current medications are Fosamax, Hydrochlorothiazide, Levothyroxine, Pravastatin and Atenolol. Her family history is significant for osteoarthritis and emphysema in her father, and ovarian cancer in her mother. The patient smoked one pack of cigarettes per day for one year while in her 20s. She does not drink alcohol or use recreational drugs.

Figures 1 and 2.
Achenbach Syndrome is a benign, self-limiting condition of unknown cause that causes paroxysmal hematomas of the palmar surface of the hands.



PHYSICAL EXAM

Vital signs were within normal limits. Head, ears, eyes, nose and throat examination was normal. No oral ulceration was noted. No lymph nodes were palpable. Inspection of her right and left hands showed 2–4mm non-erythematous immobile firm, non-tender papules on the palmar aspect of her right 2nd DIP, 3rd MCP and 5th PIP joints, as well as her left 4th PIP joint and 5th DIP joint. Additionally, there was localized, bluish discoloration overlying the papule on her right 3rd MCP, but the other papules were not discolored. No other skin lesions were noted. Mild bony hypertrophy and tenderness with palpation of all DIP joints of hand was noted. She had painless and full range of motion of wrists, elbows, shoulders, feet, ankles, knees and hips. Bilateral ulnar and radial pulses were normal. Capillary refill was normal. Cardiac and pulmonary examination were unremarkable. Neurological examination was normal.

DIFFERENTIAL DIAGNOSIS AND MANAGEMENT

Differential diagnosis to be considered include Raynaud's Syndrome, Atherosclerotic Disease, Ulnar artery thrombosis, Radial artery thrombosis, Trauma, Acute limb ischemia, Polycythemia, Cryoglobulinemia and Pernio.

The above list of diseases should be considered when evaluating a patient with suspected Achenbach Syndrome, specifically because it is a diagnosis of exclusion.[2] Because this patient had an extensive history of symptoms before presenting to the office, always resolving without clinical intervention, we concluded that her presenting symptoms were an exacerbation of her underlying, chronic disease and chose to treat supportively, as she had essentially done on her own in previous exacerbations.

Her symptoms resolved within two months.

(Figures 1 and 2)

DISCUSSION

First described by Dr. Walter Achenbach in 1955, Achenbach Syndrome is a benign, self-limiting condition of unknown cause that causes paroxysmal hematomas of the palmar surface of the hands.[3] Additionally, the digits can change color to become blue or black (Achenbach Syndrome is also known as Idiopathic Blue Finger).[4] While it often involves pain, it may be completely painless. It commonly arises in middle-aged women with no specific time course. Most commonly, symptoms occur in the index finger, followed by the middle finger, and rarely do they occur in the thumb.[5]

Because the symptoms of Achenbach Syndrome may resemble those of serious vascular and rheumatologic diseases, some patients undergo extensive diagnostic work-up including hematologic testing, vascular flow studies, hand and joint imaging, and coagulation studies. Achenbach Syndrome is a diagnosis of exclusion, the etiology of which is unknown. Extensive diagnostic testing may be avoided with more awareness of the benign and self-limiting course of this syndrome.

References

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Disclosures

None

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