

UNMASKING PSEUDOSEIZURES: SEIZURE-INDUCED PETECHIAE AS A DIAGNOSTIC CLUE

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Abstract

Seizure is a sudden, involuntary, time limited alteration in behavior, motor activity, autonomic function, consciousness or sensation, accompanied by an abnormal electrical discharge in the brain. Epilepsy can be defined as chronic seizure disorder or group of disorders characterized by seizures that usually recur unpredictably in the absence of a consistent provoking factor. Thoraco-cervical petechiae is a rare sequelae of epileptic seizure activity, it develops via the leakage of erythrocytes from capillaries and result in small hemorrhages under the skin. Here is a case of 40 year old male, from Surajpur, businessman by occupation, married, presented to the emergency with abnormal body movement precipitated by hearing the news of his father demise with no history of urinary incontinence, frothing, lip bite, tongue bite, episode lasted for half hour, patient got better after giving tab Lopez 2mg, after detailed history taking it was found that he was known case of epilepsy from past 2 years, taking Tab Levetiracetam 500mg BD, EEG was done and it confirmed generalized Tonic- Clonic seizure, on General physical examination it was found that he had thoraco-cervical petechiae involving anterior and posterior. area of chest and the cervical region, it was found that whenever he had seizure episode he has this typical presentation of rash. Patient and attendant are counselled that rash is not worrisome and will resolve within 3 weeks. The case highlights that there can be numerous causes of petechiae and clinician needs to keep a broad differential in mind, while incorporating the presentation with the clinical signs and symptoms to conclude with an appropriate diagnosis. Seizure induced thoraco-cervical petechiae should remain in the differential for a patient who presents with the specific distribution noted in this clinical case.

Keywords: Epilepsy, Seizure Disorder, Psychogenic Seizures, Generalized Tonic-Clonic Seizures (GTCs), Postictal Petechiae, Thoraco-Cervical Petechiae, Somatoform Disorder, Seizure-induced Petechiae.

INTRODUCTION

Seizure is a sudden involuntary, time limited alteration in behaviour, motor activity, autonomic function, consciousness or sensation, accompanied by an abnormal electrical discharges in the brain.

Pseudo-seizures, also called "psychogenic seizures," "non-epileptic seizures," or "hysterical seizures," are clinical events that resemble epileptic seizures but are not associated with abnormal cortical electrical discharges. They may occur as a somatoform disorder, with prevalence estimated at 5% of an outpatient population of adults with epilepsy.

Epilepsy can be defined as chronic seizure disorder or group of disorder characterized by seizure that usually recur unpredictably in the absence of a consistent provoking factor.

Case Details

Here is a case of 40 years old male, from Surajpur, businessman by occupation, married, presented to the emergency with episode of unresponsiveness associated with abnormal body movements precipitated by hearing the news of his father's demise with no history of urinary incontinence, frothing, lip bite, tongue bite, episode lasted for half hour, patient got better after giving Tab. Lorazepam 2mg, after detailed history taking it was found that he was known case of epilepsy from past 2 years, taking Tab. Levetiracetam 500mg BD, off medication from past 2 month, EEG was done and showed Eliptiform discharges, on General Physical Examination it was found that he had thoraco-cervical petechiae involving anterior and posterior area of chest and the cervical region, the petechiae resolved the next day. Over the next few days, he had two more seizures with similar transient petechiae. The patient reported similar appearing rashes that had occurred in the past after an episode of GTCs.

Ultimately, after eliminating other causes of petechiae and Dermatology reference, a diagnosis of postictal petechiae was made. No further treatment were recommended from a dermatologic perspective and Tab. Levetiracetam 500mg BD was started again.



Investigations

- Basic investigations: Vitals of the patient, CBC, LFT, KFT, Tri-dot, ECG, Bloodsugar, Lipid profile
- EEG was done to confirm epilepsy.
- Coagulation studies including Prothrombin time and Partial thromboplastin time was done.

CONCLUSION

The case highlights that there can be numerous causes of petechiae and clinician needs to keep a broad differential in mind, while incorporating the presentation with the clinical signs and symptoms to conclude with an appropriate diagnosis. Mechanism of petechiae is likely associated with extravasation of RBCs due to increased intrathoracic pressure causing ruptured capillaries. Seizure induced thoraco-cervical petechiae should remain in the differential for a patient who presents with the specific distribution noted in this clinical case.

References

- 1) Scott DF. Recognition and diagnostic aspects of nonepileptic seizures. In *Pseudoseizures* 1982 (pp. 21-34). Williams & Wilkins Co, Baltimore.
- 2) Schadler ED, Friedland M, Mancuso J (February 21, Postictal Petechiae as a Cutaneous Manifestation Following Generalized Tonic-Clonic Seizures. *Cureus* 14(2):e22437.2022)
- 3) Sodani, Shivane, Zorlu, Musab Amirjanyan, Hasmik Ade, Swetha Tunguturi, Ajay 2022/05/03 Petechiae: An Atypical Initial Presentation of Seizure (P18-8.006)
- 4) Standridge, Meaghan, and Lindsay Tjiattas-Saleski. "Seizure Induced Thoraco-cervico-facial Petechiae". *Osteopathic Family Physician*, vol. 14, no. 2, Mar. 2022, pp. 35–37