



Atypical Solitary Graphite Foreign Body in the Cheek

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Abstract

Retained foreign bodies in soft tissue pose a significant challenge for both patients and surgeons, often resulting from traumatic injuries sustained during accidents. In some cases, the initial trauma may seem insignificant, leading to delayed or foregone medical attention, and potentially resulting in overlooked foreign bodies. This report presents a case of a retained graphite foreign body from a lead pencil injury that went unnoticed for two years, ultimately leading to complications.

Keywords: X-ray; MRI; CT Scans

Introduction

Retained foreign bodies in soft tissue are challenging situations for patients and surgeons. These are generally lodged in the tissue secondary to trauma in case of accidents. Sometimes the trauma is insignificant and gets better by conservative management or patient does not report for specialist care. In such cases the foreign body may be missed in initial examination. Our present case is one such case where patient did not think twice about having an injury by lead pencil at home. He did not take medical care and landed up 2 year later with complication. Lead pencil is often used by students all over world. It has an inconspicuous presence in every home. Injury by same can lead to deposition of carbon in skin and soft tissue leading to Tattooing. Retained graphite is slowly reactive to tissues so it goes un noticed as complication may develop late. These foreign bodies are challenging to diagnose and surgeons take help of diagnostic test like X-ray, USG, CT Scans and sometimes MRI [1-5].

Case Report

This 14-year-old male patient presented to the ENT OPD of private hospital with complaints of a linear swelling 2cm long in the skin over the preauricular area left side cheek. He had a history of a sharpened pencil lead injury during the COVID-19 pandemic, which had healed naturally without medical attention. Two years after the initial injury, the patient reported feeling a mobile, 2-cm long object over the left temporomandibular joint (TMJ). It was not painful but patient was bothered by touching it several times a day. Clinical examination and palpation confirmed the presence of a linear substance under skin surface aka? Foreign body. To confirm a X-ray TMJ and USG local area was advised [6-10].

X-ray of left TMJ was done and ultrasound (USG) examination of local area was performed, which confirmed the presence of a linear hyperechoic structure of 1.8mm in subcutaneous

plane 0.8mm deep to skin over left TMJ S/o foreign body. After informed consent with patients mother as he is a minor, surgical exploration under local anaesthesia was undertaken under all aseptic precaution a curvilinear incision given over swelling and with careful soft tissue dissection a black-colored graphite foreign body 1.8cm was successfully excised. Wound is checked for bleeding hemostasis achieved. Wound is closed in single layer with ethilon 3-0 suture. The patient recovered well in the postoperative period and followed up for suture removal without any complications [11-15].

Discussion

This case highlights the importance of prompt medical attention for traumatic injuries, even if they appear minor. The patient's delayed presentation and lack of initial medical attention led to a retained foreign body, which caused chronic discomfort. The successful removal of the foreign body and the patient's uncomplicated recovery demonstrate the importance of thorough clinical evaluation and appropriate surgical management. Proper history taking gave a clue in this case so appropriate investigation was advised. A surgeon should always take proper history and rely on his/her clinical acumen as well as surgical skills.

Conclusion

This case report emphasizes the need for vigilance in diagnosing and managing retained foreign bodies, even in seemingly minor injuries. Prompt medical attention and proper surgical care can prevent long-term complications and improve patient outcomes. The present case did not have granuloma formation, however, many a times a graphite foreign body granuloma develops, which is destructive for the surrounding tissues and requires complete removal.

Ethics approval

This patient was diagnosed and treated in a private hospital set up. The patient's mother (as he is minor) provided informed consent for use of the material for educational and scientific purposes.

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