

Isolated osteomyelitis of fibula following contact with *Urtica dioica* (Bichu Ghaas) in a child

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Abstract: Bichu Ghaas or Stinging Nettle (Botanical name - *Urtica dioica*) is a perennial plant found in Himalayan region with average of 2500-3000 meter above sea level . This plant has prickly needle like structure called trichomes all over the leaves and the stem and it causes itching , swelling and urticaria over the contacted body part . It is painful experience owing to the fact that the plant has got allergenic chemicals . The short lasting and commonly non fatal incidents at times lead to morbid outcome when neglected and complicated . The description of one such rare complication is reported here.

Keywords: Infection , osteomyelitis , fibula

INTRODUCTION

Acute osteomyelitis is common in paediatric age group with initial trauma as an inciting event in most cases . Its natural history can range from complete resolution with timely diagnosis and management to conversion into chronic phase with severe morbidities. At times the triggering factor could be queer like brushing with a shrub while walking in Himalayan villages and developing skin problem later complicating into osteomyelitis . However , prompt diagnosis and initiation of the condition helps limit the future morbidity to sizeable degree.

CASE REPORT

The case , a six year old male child was presented by the parents as a case of neglected wound over the proximal half of the lateral aspect of his left leg . The history revealed that the child fell over a shrub locally called Bichu Ghaas (*Urtica dioica*) following which he developed severe itching , urticaria and localized swelling over his upper lateral aspect of left leg . There were blister formation and localized cellulitis a day later over the part and the parents took him for the treatment to a local practitioner who prescribed some form of powder and medicinal plant derivative liquid . He was not relieved of pain and developed local rise of temperature and swelling . After two weeks of interrupted and inadequate treatment they visited our centre . There was a discharging sinus over the lateral left proximal aspect corresponding with the fibular region at the time of presentation and purulent

discharge . The broad spectrum empirical intravenous antibiotics were started and the wound was cleaned and dressed .A protective splintage was given in the form of a plaster of paris slab . Basic blood investigations was sent including CRP and ESR as well as bacterial and fungal culture and sensitivity of the discharge . The radiographic evaluation showed osteomyelitis of left fibula region with a part of the bone acting as sequestrum with normal fellow bone tibia . There was no clinico-radiological evidence of adjacent joint involvement . The operative intervention to decrease biological load and promote early recovery was planned . Sequestrectomy , the removal of free lying fibula was done along with local debridement and meticulous excision of the sinus tract . The part of fibula was sent for culture and histopathological evaluation . The child was drastically recovered clinically and showed good soft tissue healing over the part in the following course of the treatment . He was given antibiotics for 5 weeks post operatively . The pus and tissue culture revealed no organism and histopathological report confirmed it as chronic osteomyelitis without any additional significant information . The child was periodically evaluated on follow up visit . There was no secondary complication of the soft tissue on the affected part and no resurgence of the similar complaint as the child was ambulating without pain and bearing full weight on the affected leg when reviewed about a year later .



Fig-1; Radiograph of patient showing fibula osteomyelitis .



Fig-2: Post operative radiograph showing removal of fibula sequestrum .

DISCUSSION

Stinging nettle, locally named Bichu Ghaas (*Urtica dioica*) is a perennial herb found in high altitude Himalayan region. It has got various usages in

traditional medicine [1]. It has been found to have various chemical mediators of inflammation and allergenic substances like histamine, formic acid, leukotrienes etc. It has anti-inflammatory, analgesic , and antiulcer properties too [2].

Human skin shows signs of localized inflammation , pruritis , erythema and urticarial rash as a result of contact with hairs on the leaves and stem of the plant . The effect has been most of the times self limiting and without overt complication. The presented incidence of a complication related to the aftermath of skin affectation following stinging nettle is unheard of and we could not find a literature reporting for the same. However a few reports about contact urticaria is reported sporadically [3].

CONCLUSION

The above case report underlines the role of social and environmental factors that have a bearing on the outcome of disease. A curious history of inciting events might help us know the potential source and help to prevent similar occurrences in the society as a whole.

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