



BMH Medical Journal 2016;3(4):107-109 **Case Report**

A Case Of Local Tetanus

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Abstract

A 38 year old lady was admitted to the hospital for with difficulty to extend the fingers of right hand following an injury to the dorsum of right hand. Based on a clinical diagnosis of local tetanus, she was treated accordingly and she became better. Owing to the rarity of this type of presentation, this case is being reported.

Keywords: tetanus; local tetanus

Case report

A 38 year old lady sustained an injury over the dorsum of right hand by rubbing against the iron gate at home while sweeping the floor 2 days ago. She cleaned the wound and no further treatment was taken. On third day morning she noticed difficulty in extending the fingers. The thumb movements were normal on right side. There was an injury on the dorsum of right hand with some surrounding erythema. There was some spasm of the forearm. Trousseau's sign was negative. She was not sure about immunization against tetanus in childhood.



Figure 1: Injury over dorsum of hand with flexion of fingers sparing the thumb

Orthopedic opinion was taken to rule out any tendon injury and ultrasonogram of right hand

revealed no obvious collection, subcutaneous oedema or other focal lesions. She had neutrophilic leucocytosis and other routine investigations were within normal limits.

She was treated with intravenous crystalline penicillin and human tetanus immunoglobulin. She was also given tetanus toxoid. Within 2 days she was able to move her finger and became better. She was discharged after completion of the course of treatment with advice to complete the course of tetanus toxoid immunization.



Figure 2: Improvement of flexion after treatment with tetanus immunoglobulin and crystalline penicillin

Discussion

Tetanus [1] is an acute illness manifested by skeletal muscle spasm and autonomic nervous system involvement. It is caused by powerful neurotoxin tetanospasmin [2] produced by bacterium *Clostridium tetani*. The incubation period varies from few days to several weeks. Here the onset time was only 72 hours. Localised tetanus is a milder form of disease where stiffness is confined to the site of the wound, in this case with flexion of the four digits sparing the right thumb with some increased tone in the forearm muscles. Hypocalcemic tetany is usually bilateral resulting in carpopedal spasm. In carpopedal spasm usually thumb will be adducted and flexed at metacarpophalangeal joint. Tendon injury was ruled out by ultrasound of forearm and hand. The dramatic relief of symptoms with antibiotics [4] and tetanus immunoglobulin administration also support the diagnosis. What was unusual was the brief time of onset, which may result sometimes in severe generalized tetanus. This may be due to the fact that the patient may be partially immunized though she was not sure about the immunization status.

Conclusion

Tetanus is a preventable disease and all persons should be immunized regardless of age. Those who working in contaminated environment should have regular booster injections. Diagnosis of tetanus is always clinical and early diagnosis is important to prevent a fatal outcome.

References

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