PP14

Frostbite - A case report

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Introduction Exposure to extremely low temperatures can cause crystal formation inside the tissues and necrosis. Administration of thrombolytic agents or prostaglandins within 24-48 hours will improve the outcome.

Case Presentation A 49-year-old previously healthy patient with a history of exposure to snow on bare foot for more than 24 hours was admitted after 2 weeks with necrotic toes and haemorrhagic blisters in both heels (Grade 4). On examination, pedal pulses were palpable. His inflammatory markers were high and was given antibiotics and intravenous prostaglandin infusion for 5 days. Once his necrosis became demarcated, he underwent right forefoot amputation, left 5th toe amputation with excision of necrotic tissue. The rest of the tissues were salvaged, and he returned to normal activities in 3 months.

Discussion Frostbite is the acute freezing of tissues that usually occurs after exposure to less than -2 degree Celsius for more than an hour. Hands and feet are the most vulnerable sites. Technetium bone scan is useful to define the area of irreversible damage. The definitive treatment for frostbite has not been defined yet. Thrombolysis and prostaglandin infusion are the recommended treatment modalities to salvage the extremities. Ideally, it should be given within 24 hours to improve the outcome. Often patients do not reach the hospitals within the grace period as they are rescued at high altitudes. We tried prostaglandin infusion on our patient even though lapse from the injury to the treatment is more than 2 weeks. The effectiveness of prostaglandin in our patient is questionable.

Conclusion Frostbite to the extremities can result in loss of limbs and impaired quality of life. This patient's lower limb functionality was salvaged in spite of offering prostaglandin two weeks after the event.