ICCP/SL/OP/290

Electrocution of a child via a kite thread: A case report highlighting child safety

Seneviratne P[1], Vadysinghe AN[2], Ekanayake EMNK[2*], Ekanayake EMKB[2], Wickramasinghe CU[2], Bandarage S[2]

[1]Base Hospital Homagama, Sri Lanka.
[2]Department of Forensic Medicine, Faculty of Medicine, University of Peradeniya, Sri Lanka
[*]navodyakekanayake@gmail.com

Background: This study reports a unique and tragic death of a nine-year-old child, caused by transmission of electricity through a kite thread made of nylon; a phenomenon unreported in global literature.

Case study: The retrospective history was obtained by the child's grandfather, an eye witness of the incident. The victim was flying a kite attached to a nylon thread, in proximity to a main highway road, under the supervision of his grandparent. The thread is entangled in a high voltage power transmission unit, transmitting an alternate current of 33,000 V. The free end of the nylon thread was still in contact with the child's right hand. The victim suddenly became unconscious and was rushed to the emergency unit of a base hospital, where he was pronounced dead on admission. Post mortem examination revealed burn injuries on the back of the thumb and index finger of the right hand. These burn injuries were consistent with an entry wound caused by electrocution. There were no similar injuries elsewhere on the body. Nylon is generally known to be an insulator, which questions the mode of conduction. Further inquiry revealed that the child was having hyperhidrosis, especially on the palms. This had allowed the thread to be coated in sweat while being released, making it a conductor of electricity, leading to a fatal electrocution.

Conclusion: Even under close supervision by parents, children are still vulnerable to injuries. Flying kites is a common childhood activity and electrocution is an unforeseen risk of it, particularly in urban areas with unprotected overhead power lines. Kids with hyperhidrosis should be warned and given special attention when handling household electric devices.

Keywords: Accidental electrocution, child, electric injury.