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Short communication

Penetrating facial trauma from a Taser barb

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Abstract

The Taser X26® (Axon) is a conducted energy device that is used by the police forces in the United Kingdom to deliver a high voltage shock that will disable a person. Injuries related to its use are uncommon but can be serious, the extent of the damage caused being related to the structures targeted and the length of deployment of the electrical charge. We describe a 15-year-old boy who had a penetrating midfacial injury after deployment of a Taser, the barb of which became embedded in the subtarsal region of his left cheek. Removal under general anaesthetic was uncomplicated, and exploration of the wound showed that there was no damage to adjacent structures. Case reports of this type are limited, and we know of none of a penetrating injury of the midface.

Keywords: Penetrating facial injury; taser barb; midfacial injury; trauma

Case report

A 15-year-old boy had a midfacial injury as a result of the use of a Taser gun while he was detained by the police. The barb of the Taser became embedded in the subtarsal region of his left cheek (Figs. 1 and 2). Removal under general anaesthetic was uncomplicated, and exploration of the wound showed no damage to adjacent structures. The wound was closed primarily and he was discharged the next day.

Discussion

The Taser X26® is a brand of conducted energy device used by the police forces in the United Kingdom to deliver a high voltage shock that will disable a person by triggering severe pain and involuntary muscular contraction. Most recent quarterly figures showed that the Greater Manchester Police fired 44 Tasers between October and December 2016.[1] Their use by the police remains controversial, and the United Nations Committee on the Rights of the Child has made numerous appeals for the prohibition of the use of such weapons on children.[2]

Authorised professional practice guidelines from the College of Policing advise that these penetrating probes should be removed by medical professionals, in particular when the probe is in a vulnerable area such as the head or eye.[3] Advice for healthcare professionals in these cases is scarce, and limited to using their professional judgement and seeking specialist advice when necessary. The advice emphasises that deeply penetrating probes must lead to a thorough assessment of deeper tissues, which may have compression injuries.[4]

Although the use of such technology is increasing, we know of few published case reports, none of which have described a penetrating injury to the midface. Documented injuries include serious loss of visual acuity and loss of retinal function as a result of a barb becoming lodged in the lower eyelid,[5] and damage to the retina from a penetrating injury 1.5 cm below the lower eyelid.[6] These highlight the

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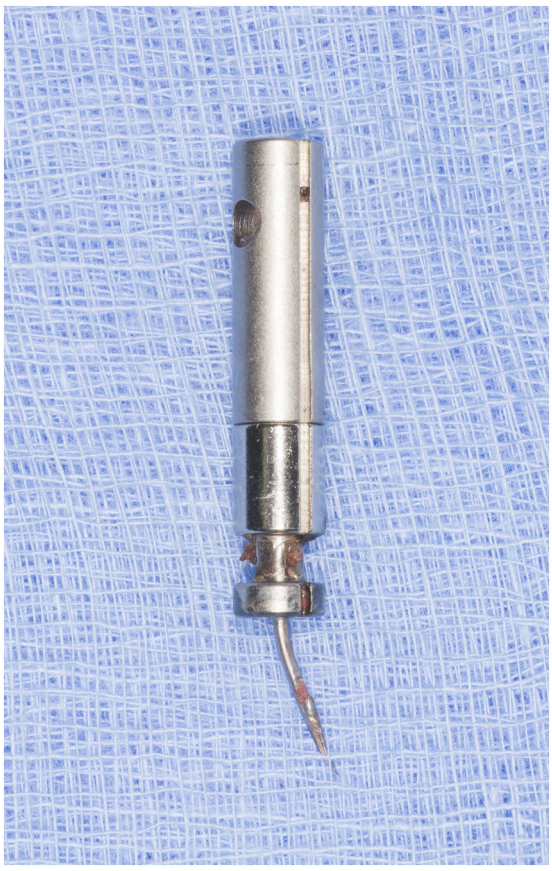

Fig. 1. Taser barb after removal.

Fig. 2. Taser barb lodged in the subtarsal region. Published with patient's and guardian's consent.

risk of damage to deeper, important structures when Tasers are aimed at the face, and also emphasise the good fortune of the patient we treated in his escape from a more critical injury.

The use of non-lethal means of incapacitation and detainment by law enforcement officers are rising. Injuries related to the use of Taser barbs are uncommon, but can be serious. The extent of the damage caused is related both to the anatomical structures targeted and the length of deployment of the electrical charge, which highlights the need for careful training in their use. A Taser should not be used unless it is necessary to facilitate a detainment and officers should avoid deployment towards the face or globe.

Conflict of interest

We have no conflicts of interest.

Ethics statement/confirmation of patient's permission

Ethics approval not required. The patient's permission was obtained.

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