Case Report

Unusual presentation of firework injury causing intraoral burns

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ABSTRACT

Fireworks are commonly used in celebrate festive occasions. We present a case of an unusual presentation of intraoral firework injury, which is a very rare case. A fifteen year old boy kept four explosive papercaps wrapped in a small polythene bags in between his left molars and crushed them. This resulted in a contused lacerated wound over the left buccal mucosa. Patient was treated conservatively with maintenance of intraoral hygiene, antibiotics, proteolytic enzymes and analgesics. It took 18 days for complete healing of the wound.

KEY WORDS

Firework, Intraoral, Papercaps

INTRODUCTION

ireworks are commonly used in both developed and developing countries to celebrate festive occasions related to tradition, religion, or culture. Firework injury is a common injury faced during Diwali, especially the flame and blast burns sustained by kids while bursting crackers. We present a case of an unusual presentation of intraoral firework injury, which is a very rare case.

CASE REPORT

A male patient, fifteen year old class tenth student while returning back home at 9:30 PM after playing had an impulsive thought in his mind and kept four explosive papercaps (used in toy pistols) wrapped in a small polythene bags in between his left molars and crushed them. He had sound of bursting of papercaps associated with bleeding and burning pain. On intraoral examination [Figure 1], there was a 4 x 3 centimeters irregular contused

lacerated wound over the left buccal mucosa starting just behind the left oral commissure and extending in retromolar region. Pieces of torn polythene bag were also stuck to the wound. There was no other injury. After



Figure 1: Intraoral findings on presentation



Figure 2: Diffuse swelling over left parotidomasseteric region

admission he developed trismus and diffuse swelling over left parotidomasseteric region [Figure 2] which increased till the fifth post-injury day then started decreasing. Patient was treated conservatively with maintenance of intraoral hygiene (povidone iodine gargles), antibiotics, proteolytic enzymes for tissue edema (trypsin and chymotrypsin) and analgesics. Patient was discharged on tenth post-injury day after decrease in pain and swelling. It took 18 days (post-injury) for complete healing of the wound [Figure 3] and there was adequate mouth opening.

DISCUSSION

Most of the firework injuries are due to burns followed by contusions, lacerations, and foreign bodies. Males^{2,3} are more commonly injured than females. Persons who are actively participating in fireworks-related activities are more frequently injured, and sustain more severe injuries, than bystanders. Firecrackers⁴ followed by rockets and the fountains cause most of the firework injuries. Papercaps rarely cause firework injury. The parts of the body most often injured are hands, face and thighs.^{5,6} Most of the involved patients are children⁷ (especially those without adult supervision) as younger children often lack the physical coordination or mental maturity to handle fireworks safely. Children suffer accidental burns injuries because of their natural curiosity, their mode of reaction, their impulsiveness and their lack



Figure 3: After complete mucosal healing

of experience in calculation of risk. Children are often excited and curious around fireworks,⁸ which can increase their chances of being injured through careless and dangerous behavior.

Intaroral firework injuries to the best of our knowledge have never been reported. For prevention of such injuries, it is suggested that the domestic use of fireworks of any kind should be supervised and that their use in public should be strictly regulated.

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