



Case Report

Unusual Delayed Presentation of Celebratory Gunshot injury; Case Report

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Summary

Celebratory gunshot fire is a common problem all around the world, especially in the undeveloped and developing countries. People shoot into the air for celebration something, such as any kind of sports game, like football, new years, wedding ceremony or special national days. These celebrations generally occur in the crowded places or public housing areas and that can be result undesirable injuries.

Here, we present an unusual delayed injury, a 13 years-old boy presented 7 days after an unrecognized celebratory gunshot injury with complaints of headache and vomiting.

Key words: Celebratory gunshot injury, head trauma, delayed presentation

Geç Tespit Edilen Kutlama Atışı Yaralanması; Olgu Sunumu

Özet

Kutlama atışları özellikle gelişmemiş ve gelişmekte olan ülkeler için önemli bir sorundur. İnsanlar, futbol maçlarından sonra, yılbaşı, düğün törenleri veya ulusal özel günleri kutlamak amacıyla sıklıkla havaya ateş ederler. Bu kutlamalar genellikle kalabalık alanlarda veya yerleşim yerlerinde yapılır ki, bu da istenmeyen yaralanmalara neden olabilir.

Bu çalışmada, kutlama atışı nedeniyle yaralanmış ancak yaralandığını fark etmemiş, 7 gün sonra başağrısı ve kusma şikayetleri ile başvuran 13 yaşındaki olguyu sunuyoruz.

Anahtar Kelimeler: Kutlama atışı yaralanması, kafa travması, geç başvuru

INTRODUCTION

Civilian gunshot injuries are common public health problem all around the world^(1,4,7). It causes serious morbidity and mortality. Generally these injuries occur intentional^(1,4). Celebratory gunshot injuries are not rare in undeveloped and developing countries. However, it is suggested that these are accidental injuries. During the celebrations, persons shoot with their guns into the air and bullet return to the earth with the gravitational force and that can be lead undesirable injuries^(1,4,7). These are named celebratory gunshot injuries by World Health Organization in 1992⁽⁸⁾.

CASE PRESENTATION

A 13 year-old patient admitted to policlinic of Neurosurgery Department of Samsun Mehmet Aydın Education and Research Hospital because of headache and vomiting for five or six days. Past history revealed, patient went a wedding party 7 days ago with his parents. After that, patient had headache and last one or two days had increasingly headache and vomiting. Patient's neurological examination was normal. A cranial computed tomography (CT) scan was performed. CT scan revealed a subacute cortical and subcortical hematoma and extra-cranial bullet in left parietal region (Figure 1). During patient's physical examination we found a scar, less

than 1 cm. length, on the scalp, left parietal region. When we asked to the parents, they told, there were persons in the wedding party who fired into the air for celebration purpose. Patient underwent an operation, hematoma and bullet evacuated using a mini craniectomy. Patient's post-operative course was uneventful and he discharged from the hospital on post operative day 4. A controlled CT scan was performed and there was not any problem (Figure 2).

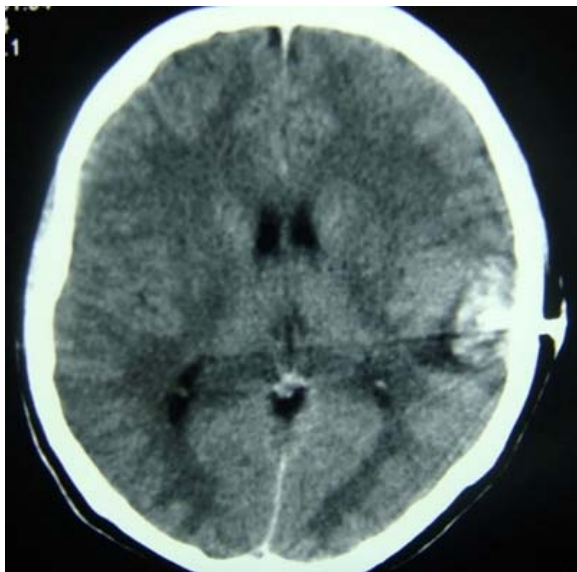


Figure 1: CT scan showing a subacute cortical and subcortical hematoma and extra-cranial bullet in left parietal region



Figure 2: Post operative 1. day control CT scan showing mini craniectomy and post operative changes

DISCUSSION

The increasing of individual armaments all around the world is a major public health problem. There are many reports in the literature about civilian gunshot injuries^(2,3). It is widely known that these injuries causes serious morbidity and mortality and occur intentionally. Accidental gunshot injuries can be seen especially during the celebration firing^(1,4,6,7,8). Persons shoot into the air for celebration wedding, special national days, new years or sports games and these generally occur in crowded and public housing areas. When a bullet fire into the air, it ascends up to zero point against the gravitational force than falls to the earth. Reports show that between 148 and 197 feet per second velocity required for skin penetration. Previous reports presented that a bullet velocity can reach, up to 600 feet per second during its downfall with the aid of gravitational force and it changes with the ratio of its weight to its diameter and wind resistance. This velocity is sufficient to penetrate the skin and cranium that cause serious morbidity and mortality^(1,4,6,7). Celebratory gunshot injuries can be seen widely in undeveloped or developing countries, it can be seen also in developed countries. Ordog et al presented, 118 falling-bullet injuries in Los Angeles between 1985 and 1992⁽⁶⁾. In Kuwait, 20 persons died during the celebrations for the end of Gulf War because of falling bullets⁽⁴⁾. Rodriguez et al reported 19 celebratory gunshot injuries during the 2003 new year celebrations in Puerto Rico⁽¹⁾.

Celebratory gunshot injury can occur at any part of body. Ordog and Rodriguez et al reported different ratio for affected body location, but head (% 77 and % 36) and shoulder (% 12 and % 18) were most affected areas^(1,6).

Gunshot injuries usually results in serious lacerations and patients are diagnosed, evaluated and treated at the time of injury. But this case have an unusual presentation.

13 year-old boy presented 7 days after, an unrecognized celebratory gunshot injury with complaints of headache and vomiting. There are few reports in the literature similar with our case. Lee et al reported a nail gun injury in 2007, with an unusual delayed presentation⁽⁵⁾. Both of these cases were diagnosed because of the symptoms of increased intracranial pressure than performed a CT scan and treated with surgery.

In conclusion, individual armaments can cause serious morbidity and mortality and it is important to limit the firing by guns in crowded and public housing areas for prevention the accidental injuries. We also wanted to attract attention of patients in emergency departments with the symptoms of increased intracranial pressure. They can be have any type of injury and it must be performed a cranial CT scan for missing out of any injury.

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