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## Medico-legal issues in airgun injuries

Gunethilake KMTB<sup>1</sup>, Vidanapathirana M<sup>2</sup>

<sup>1</sup>Consultant Judicial Medical Officer, Provincial General Hospital, Ratnapura, Senior Lecturer, Department of Forensic Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura

Corresponding author: mudithavidana@sjp.ac.lk

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### Introduction

Anybody can buy an air gun for the purpose of hunting and a license is not needed because there are no laws related to air guns. The only difference of air gun with rest of firearms is propels projectile by means of compressed air. Therefore, isn't it a firearm?

### Case report

An 8 year old boy was admitted to a ward with an injury to the right hand. According to father, the injury was due to an accidental fall. There was a circular shape 3 mm perforated laceration with 5 mm abraded margin at the base of right palm (Fig 1). There were no burning, blackening or tattooing. X-ray examination revealed a dumbbell shaped radio-opaque foreign body (Fig 2). A metallic foreign body was surgically removed (Fig. 3). Later, it was revealed that the child received injuries while playing with one of his relative children with an air gun.

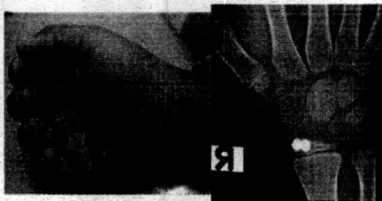


Fig. 1. Entry in palm Fig.2. Foreign body



Fig. 3. Recovered pellet

**Discussion:** The pellet found in this case was wasp waist shaped [1] with pointed head. When the head is flat, as found in "match pellets", it retards the penetration and

ensures the safety [1]. When the head of the pellet is pointed, it could cause serious injuries to soft tissues. The entry wound did not have features due to secondary projectiles of explosives such as burning, blackening or tattooing [2]. Shape of the pellet and the autopsy features further confirmed that the injuries were compatible the given history of pellet discharged from an air gun.

However, the firearms are dealt under "Firearm ordinance of Sri Lanka" [3]. However, air guns propel projectiles by means of compressed air, whereas in ordinary firearms, it is by burning of explosives. Further, the firearm ordinance directly excludes air gun as a firearm: "any weapon of whatever description, designed or adapted for the discharge of any noxious substance is also considered as a firearm, except air gun" ("gun"(d) subs by s 2(3) [3]. Therefore, according to Sri Lankan law, air gun is not considered as a firearm. Therefore, "injuries" caused by air guns cannot be categorized under firearm injuries and in the MLEF, we mentioned them under ordinary injuries abrasions and lacerations. Though we usually mention the "type of weapon" as firearm, in this case, it was mentioned as air gun. Categorized as grievous hurt.

Further, injuries due to modern air guns can be serious or even fatal because most modern air guns can exceed the velocity of conventional hand guns. They have the ability to penetrate a child's skull and brain [4].

When a pellet injury is found in palm, it is considered as a defence injury. The possibility of homicidal injury was excluded on the histories of child and guardian.

**Conclusions:** The findings were compatible with injuries caused by an air gun. Although air guns can be used in meaningful manner, it is dangerous in children's hands. Though no reported fatal cases in Sri Lanka, they can be modified and use for dangerous purposes. Therefore, it is recommended to develop regulations and control on air guns.

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