

## Devotion with Caution- A Case Report of Accidental Electrocution

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### Abstract

Electrocutions are usually rare and almost always accidental in nature. They represent only a small segment of unnatural deaths and often occur accidentally in domestic and occupational places. However accidental electrocution occurring during public gathering is a rarity. Department Of Forensic Medicine and Toxicology, BIMS, Belgaum received inquests' for conducting Post Mortem on four deceased persons, who had lost their lives during a mass gathering at "ganapathi visarjan". These case reports show the loss of four precious lives for no fault of theirs. Though this might just pass off as another case in the record books of "autopsies conducted" the need arises to highlight the points on what went wrong to cause such a tragic incident and what could have been done to prevent such a scenario.

**Key words:** Ganapathi Visarjan, Electrocution, Prevention

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### Introduction:

Electricity is an energy which moves in a path with a tendency to pass to the earth, where it gets neutralised. Man is prone to electrocution if the mode of supply & circulation of electricity is unsafe and without any precautionary measure, where the human body becomes a suitable conductor for earthing of electric current; Thus making humans prone for accidental electrocution.<sup>1</sup> Ganesh Chaturthi is the Hindu festival of Lord Ganesha. While it is been celebrated all over India, it is most elaborate in Andhra Pradesh, Maharashtra, Karnataka, and Goa. Symbolically, Lord Ganesha visits the home on Ganesh Chaturthi day and it is family to decide when they want to give him the farewell. This can happen on the very next day after

Ganapathi Chaturthi or the 3rd, 5th, 6th, 7th and 10<sup>th</sup> varying accordingly to the personal & regional beliefs. This farewell that is performed is known as Ganapathi Visarjan ceremony.<sup>2</sup>

On the day of one such Ganapathi Visarjan, Department Of Forensic Medicine and Toxicology, BIMS, Belgaum received inquests' for conducting Post Mortem on four deceased persons. According to the information furnished by the police, all the four persons had lost their lives due to Electrocution, during a mass gathering at a local area. All the four deceased were brought dead to the casualty with history of having come in contact with a high voltage electric wire. As per the police enquiry, the incident occurred at the local area when the devotees at the Ganapathi Visarjan were pulling the trolley carrying the statue of God.

The iron-rod supporting the 28-foot-tall "eco-friendly" Ganesha idol (Fig1) came in contact with the high-tension electric wire laid across the road. Those pulling the trolley suffered severe shocks.<sup>3</sup>

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**Cases Details:**

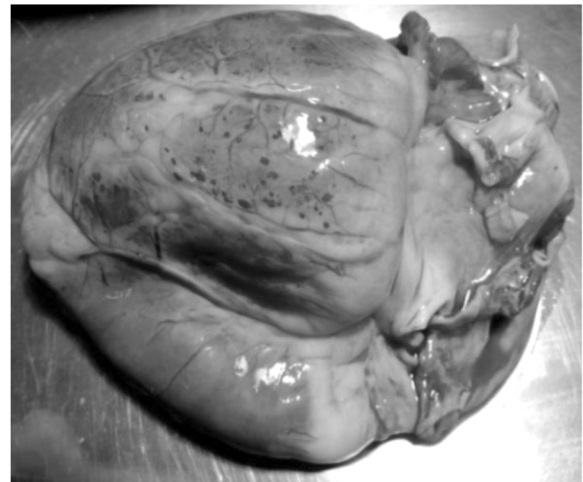
Details of the Victims & injuries sustained has been tabulated as follows:

<b><u>Case No.</u></b>	<b><u>External Examination</u></b>	<b><u>Internal Examination</u></b>
Case No.1 15 year old male	1. An area of 4x3cms behind the right ear showed superficial burns. Mid part of the burnt area is darkened & hardened. Periphery of the burnt area showed peeling of skin exposing reddish brown dermis beneath(entry wound) 2. Burnt area of 5x4cms over the lateral border of the right foot exposing darkened hardened burnt tissue with peeling of skin.	Petechial hemorrhages' seen over the surface of the heart. (Fig 2)
Case No. 2 35year old female	1.Bleeding from nose present 2.Laceration(3x1cmxbone deep) over the bridge of the nose 3.Multiple tears were present over the lower lip 4.Diffuse superficial burns over an area of 11x7cm, on the left upper thigh, with punched out lesions in the middle – The area is darkened, hardened with peeling of skin 5.Multiple Superficial burn injuries with peeling of skin over the Right cheek, Right fore head, outer aspect of the Left hand, outer aspect of the Right forearm & Right flank.	All Organs Intact
<b><u>Case No. 3</u></b> 9 Year old male	1. White froth from mouth & nostrils present. 2. Diffuse superficial burns over the Right side of the face with peeling of skin exposing the red debris. 3. Singeing of scalp hairs over the left parietal region with loss of scalp hair over an area 5x3cm. 4. Cavity deep crater 7x6cm over the Right Flank through which the intestines protruding out which are thickened & hardened-Margins blackish with peeling of skin. 5. Diffuse superficial burns over an area of 12x6 cm over the Right inguinal region extending over the external genitalia. 6. Diffuse multiple burn injuries over the back, hips, & back of lower limbs. (Figure 3 & 4)	Petechial hemorrhages over the surface of the heart
<b><u>Case No. 4</u></b> 52 year old male	1.A vertical crater of 12x2 cm over the back of Right ear extending above into the head & below up to upper half of the neck, exposing the burnt, darkened & hardened tissue in the floor 2.Singeing of scalp hair present 3. Diffuse superficial burns over an area of 15x10cm in the mid part of the abdomen with multiple punched out lesion- The area shows peeling, darkened and hardened skin. 4. Diffuse multiple burnt lesions over left shoulder, Left upper limb, both lower limbs, great toes & genitals.	1.lungs lacerated 2. Petechial hemorrhages over the surface of the heart & in white matter of brain.

Cause of death was opined as; Death is due to Electrocution.<sup>4</sup>



**Fig 1: Ganapathi Idol**



**Fig 2: Petechial hemorrhages over the surface of the heart**



**Figure 3: Diffuse multiple burn injuries over the back, hips, & back of lower limbs**



**Figure 4: Cavity deep crater over the Right Flank through which the intestines (thickened & hardened-Margins blackish with peeling of skin) protruding out**

**Discussion:**

Accidents may be encountered when individuals disregard warning signs or ignore the presence of high voltage cables while moving some ladder or otherwise, engaged in some activity in the vicinity of the cable.<sup>5</sup> Electrical petechiae represent a non-specific but typical finding in electrocution irrespective of the mechanism leading to death.<sup>6</sup>

Belgaum City located at the border of Maharashtra & Goa has a mixture of various ethnicities & cultures. People here celebrate the Ganapathi Visarjan with great enthusiasm, pomp & pride. The pride is such that, it is directly proportionate to the height of the Ganapathi statue!!! On the day of the incident the city had around 300 Ganesha idols installed at various places around the city. All the installed Idols follow the same path for procession before being let off into the lake creating crowd accumulation & unnecessary chaos. There is very little scope for public safety at such mass gatherings. What went wrong? Here in our case there was loss of 4 innocent lives for no fault of theirs.

- Did God punish them for their mistakes?
- Or did God seize to exist at that moment?

It was a case of sheer negligence & mismanagement. Though there are laws about the specifications in size & manner in which the Ganesha idols have to be placed, these are least taken care of. The maximum permitted height for the idols taken on procession is less than 15 feet but in our case it was 28 feet. There are so many Laws present and been formulated in the region, which most of the times are violated.

**Conclusion:**

Such unfortunate incidences could be reduced by,

- Minimizing the number of idols installed by granting permission for a fixed number, for the specific area.
- During the procession as all the idols taken out follow a specific path, Power &

electricity management can be done to avoid such tragic events.

- Regulation on the height of the idols and strictly adhere to the regulations.
- The electricity board to regulate the average height of the high tension electric wires installed.
- The city police to coordinate in active crowd control measures.

This was a situation of negligence, mismanagement & non implementation of the existing laws. These case reports stress the need for implementation of the existing laws in a stringent manner, without any violation for the safety of the common man & welfare of the society.

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