

## Accidental Fatality by Dead Coconut Tree

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### Abstract:

Coconut tree is often worshipped as „*kalpavriksha*“ in Hindu Mythology, (*kalpa*; *desire and vriksha*; *tree*) as it is believed to fulfil one's wish. Inadequately maintained coconut trees claiming human lives is becoming a matter of concern with rapid urbanization and deforestation, as a need of modern civic requirements. A case of fatal accidental head injury due to impact of a falling dead coconut tree on a 35 year old man is reported and discussed. This case report analyzes the possible grounds on which death and or serious injuries due to falling trees/branches may cause. The inherent risk, its preventability and liability in such tree fall accidents are highlighted.

**Keywords:** Coconut trees, Urbanisation, civic requirements, inherent risk

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### Introduction:

Trees and its branches usually do not qualify as a dangerous entity causing injuries and death. But severe injuries from falling trees and branches are more common than one can realize. This may not just apply to storms and other unpredicted natural catastrophe.<sup>1</sup> Ill-maintained, inadequately monitored and aged trees may become hazardous even under regular weather conditions. Such trees may cause unprecedented fatalities. The major chunk of such deaths goes unaccounted in India, as the issue is less spoken or remedies less sought after. The proximity of trees to people and property is a major factor in deciding how rigorously they need to be inspected and what sort of remedial action is appropriate if significant hazards are found.<sup>2</sup>

### Case report:

The deceased was a 35 year old healthy man, who happened to be an unsuspecting passerby on a vacant plot where, land clearance and levelling was underway by a JCB (Joseph Cyril Bamford Excavators Ltd) machine. Inadvertently, the JCB machine

had touched the trunk of a 'dead' coconut tree (Figure 1), bringing it down to earth. The deceased, presumably unable to judge where the tree might land, eventually got his head hit by the trunk of the tree and died instantaneously at the spot (Figure 2). The deceased was shifted to the autopsy room of the department of Forensic Medicine, JSS Medical College, Mysore, by the investigating officer. On external examination, the brain matter was seen protruding out of left ear canal along with frank blood. The principal injuries present on the deceased included a split laceration, 2.5X1 cm and bone deep on left temple; abraded contusion, 4X2 cm, on the outer aspect of left cheek; multiple grazed abrasions, over an area of 21X15 cm, on the front and inner aspect of lower half of right thigh; bony deformity at the lower 3<sup>rd</sup> of right leg associated with underlying fractures of both bones. The injuries were evaluated as fresh and ante mortem in nature. The internal examination was remarkable with diffuse scalp contusion associated with multiple grossly displaced comminuted fractures of vault and base of the skull (Figures 3 and 4). Meninges were torn and brain matter was protruding out with fractured fragments. Brain was found to be grossly mutilated with

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diffuse cerebral contusions, lacerations and intracranial hemorrhages. Spinal cord was transected at foramen magnum. The cause of death was opined as cranio- spinal lesions, following blunt force impact to head and neck.

### Discussion:

Tree related fatalities occur in circumstances in which the victims were either not aware of the hazard, felt the hazard was slight, or were unable to diminish the hazard successfully.<sup>3</sup> It is no great insight that there is some inherent risk around trees, which, after all balances tonnes of weight over one's head.<sup>3</sup> What might be surprising is how few incidents can be readily attributed solely to this inherent risk, without the inclusion of specific reasons.<sup>3</sup>

Indian society in general and environmentalists in particular, do not endorse cutting down trees, more than ever, a coconut tree. It is construed as a sin. But one shall realize that cutting down „*worn and dead trees*“ is far more beneficial and safer than leaving them alone, as it was one such tree that had caused the demise of the case subject.

Identification of trees that are in bad physical shape likely holds the key in guarding oneself and others from the hazards of accidental and unforeseen tree falls. The main foci of attention should be on assessment of the tree, its geographical location and prevailing weather.<sup>3</sup> A protocol is suggested to safe guard human lives from unworthy trees. (Table 1)

Table 1: Protocol to safe guard human lives from unworthy trees.<sup>3</sup>

<p><b>1. Assessing trees:</b></p> <p><b>a. Tree health</b></p> <p>Are there signs of ageing?</p> <p>Is the tree dead?</p> <p>Are there dead branches or dead leaves or twigs at the end of branches?</p> <p>Are there visible signs of rot or fungal attack on the trunk?</p> <p><b>b. Tree structure</b></p> <p>Is the tree leaning?</p> <p>Are there any structural weaknesses?</p> <p>Are there visible signs of damage to roots, trunk, or branches, such as cracks, or bulges?</p> <p><b>2. Assessing location:</b></p> <p>Is the area at risk from falling branches or the whole tree falling?</p> <p>Is the tree particularly susceptible to wind loading from any particular direction?</p> <p><b>3. Assessing weather:</b></p> <p>Is the ground soddened?</p> <p>Are the rains softened the ground?</p> <p>Is there a terrible weather forecast?</p>	
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If the answer to any of the queries in the protocol is *YES*, then probably the tree is a threat to human life and is worth to sacrifice it or steer clear from its vicinity. Along with

the risk management plan, an attempt shall also be made to assign the liability in such fatalities.

The plot owner or care taker may be held as liable if actual notice of a dead or decayed tree was not heralded with any attempts to remove it. The plot owner is expected to be reasonably careful to safeguard the human life in the near vicinity. If the landowner is ignorant about the issue, it may be necessary to consult an expert who can determine the pre-fall tree condition by examining the remains of the tree.<sup>4</sup> Whether a tree was decayed, diseased or dead for months or years will have a significant impact on the quantum of damage and subsequent liability of the owner.

The liability in the present case may be apportioned between the plot owner and the contractor who was working on the project of site-clearing, which may be inferred as liable.

In general, trees located on public or private property are expected to be maintained in a healthy condition and removed when they are dangerous. Cities or private land owners can be apprehended legally responsible if damage is caused to an individual due to a falling tree or branch.

### Conclusion:

No tree is entirely safe, given the possibility that an exceptionally strong wind could damage or uproot even a mechanically „*perfect*“ specimen. Although incidents involving trees are likely to be regarded as „*freak accidents*“ under natural circumstances.<sup>3</sup> It amounts to criminal negligence when a tree is severed down by a JCB machine costing the life of a man, which may be qualified to be mentioned under section 304 (a)IPC.

Periodical inspections of health of the trees by private/ public land owners and removal of dead and decayed ones shall be mandated.<sup>5</sup> It would prevent precious lives of

mankind from unwarranted demise and also evades law suits regarding the issue.

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