# Driverís injury pattern; ex-articulation of right big toe nail

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#### Introduction

In a road traffic accident, identification of the driver with his contributory factors (alcohol, drugs, diseases, deformities and licence) is a main issue in medico-legal examination. When all passengers are dead and have been removed by lay people it is the main practical problem. Recognition and evaluation of injury patterns with vehicle damage is the solution. This case illustrates the identification of the driver by ex-articulation of right big toe nail.

## History

A van with four passengers was driven into a stalled lorry at midnight on 3 December 2004. Two passengers were dead and the other two were critical. Two dead bodies were subjected to postmortem examination at a local hospital, and no injury was found to suggest that one was the driver [1, 2]. Two injured people were transferred to Teaching Hospital, Kurunegala and died several hours later.

#### **Examination**

Autopsy of one body revealed the following injuries: abrasions of the right shoulder and both knees, contusions on the right eye and right thigh, abrasion and contusion on dorsum of the right foot with underlying dislocation of the first metatarsophalangeal joint, and fresh ex-articulation of right big toe nail.

### **Discussion**

During an accident, the right foot is reflexly moving from gas-pedal to brake-pedal. Injuries of right foot are commonly seen in drivers in head-on collisions [3, 4]. Injuries on the dorsum of foot and ex-articulation of a big toe nail suggested this man as the driver. Other injuries were not typical of a driver's injury patterns but they were not inconsistent [2]. Necessary investigations were

performed on the body to exclude contributory factors, such as alcohol and drugs.

At the end, reconstruction of the events was explained to the Police as follows.

"Probably, the driver suddenly saw the stalled lorry, vigorously applied the brake, but the tip of big toe nail hit the brake pedal, and made the ex-articulation, leading the van being driven into the lorry. Therefore brake marks cannot be expected on the road".

Police stated that they were wondering about absence of brake marks and the unusually deep impact of the van into the lorry.

### Conclusion

Fresh dislocation of right big toe nail is highly suggestive of a driver's injury pattern, especially in countries such as Sri Lanka, where people drive vehicles without wearing shoes.

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