



Pathology Biology Section – 2003

G58 Roll-Over Automobile Accident Survived By the Author as a Passenger

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The attendee to this presentation will learn that most transportation accidents are multifactorial and that 3-point restraints are very effective in preventing serious injuries and deaths in vehicular accidents.

Trained investigators and attorneys recognize that most, if not all, transportation accidents are multifactorial. Rarely does a survivor of a vehicular accident such as this have both the desire, and the opportunity to document the scene of the accident and the condition of the vehicle soon after the event. Images of vehicle and scene will be presented.

In England, four friends took a day trip by automobile in late winter. The owner and driver of the 1992 Toyota Carina 4DS was a 76-year-old male. Three friends accompanied him, the author in the left rear seat. The owner-driver drove about 184 miles with several stops on two-lane roads in cold wind and rain. The destination was reached in late afternoon. The return trip was begun at about 7:30 p.m. on two-lane roads and in pitch-dark and rain.

Nearing the driver's home and on a straight, smooth, two-lane asphalt road, he allowed both left-side wheels to suddenly fall onto the shoulder. He quickly over-corrected with the car sliding right and into the center of the road. Over-correcting again to the left, the driver narrowly avoided a telephone pole on the left shoulder as the car left the road and traveled obliquely down a 2-3 foot steep bank turning onto its right side. The right front nosed down into a muddy field, the car then overturning in its longitudinal axis and coming to rest on its top facing the direction of travel. Each occupant was belted; each escaped through his/her window. Three occupants each sustained minor injuries.

The next afternoon, the author obtained the driver's permission to take Kodachromes for teaching purposes. The windshield was extensively cracked, and was detached at its crown. The roof was indented back to the center posts, but passenger space was otherwise preserved. The accident scene was also documented.

Analysis - This accident was clearly multifactorial: 1) an elderly driver with chronic disease, 2) poor weather, 3) driver fatigue, 4) a slick, newly paved road at the accident site, and 5) the driver, once in trouble, over-correcting twice.

Ameliorating factors: 1) speed slowed by braking before leaving the road, 2) no other traffic, 3) driver avoiding the telephone pole, 4) rain-soaked field absorbing roll-over impact, and 5) all passengers were restrained.

Conclusion: A potentially serious multifactorial accident in which the restrained occupants were nonetheless fortunate to survive.

Automobile Accident, Multifactorial, Restraint Systems