

Comparison of Injury Severity to Near-side and Far-side Occupants in Side Impacts by Motor Vehicle Crashes

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In this study, we compared the injury severity of occupants according to the seating position and the crashing direction in motor vehicle accidents. In the driver's point of view, it was separated the seating position as 'Near-side' and 'Far-side'. The study subjects were targeted by people who visited 4 regional emergency centers following motor vehicle accidents. Real-world investigation was performed by direct and indirect methods after patient's consent. The information of the damaged vehicle was informed by Collision Deformation Classification (CDC) code and the information of the injury of patients was informed by using the Abbreviated Injury Score (AIS) and Injury Severity Score (ISS). When the column 3 in CDC code was P, damaged at the middle part of lateral side, the average point of AIS 3 was 1.91 ± 1.72 in near-side and 1.02 ± 1.31 in far-side ($p < 0.01$). The average point of maximum AIS (MAIS) was 2.78 ± 1.39 in near-side and 2.02 ± 1.11 in far-side ($p < 0.01$). The average point of ISS was 15.74 ± 14.71 in near-side and 8.11 ± 8.39 in far-side ($p < 0.01$). Also, when the column 3 in CDC code was D, damaged at the whole part of lateral side, it was significant that the average point of AIS 3 and MAIS in near-side was bigger than in far-side ($p = 0.02$).

Key Words : Motor vehicle crash, Injury analysis, Lateral impact, Near-side, Far-side

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