

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

Discontinuity in injury potential as a function of insult angle

SAAMI SHAIBANI, Instruction Methods, Academics Advanced Scholarship — Vehicle collisions with low severity ($\Delta v < 5$ m/s, say) are associated with low injury ($\text{AIS} \leq 1$)[1] as a rule; however, even a slight change in pdof (principal direction of force) can have a dramatic change in injury outcome. In one particular case, the insult pdof was primarily along positive x (forward, arising from a rear impact) with a small component along positive z (downward, arising from the striking vehicle being higher than the struck). The somewhat unusual nature of the latter was responsible for a mechanism of injury to the lower extremities that would not otherwise have occurred. This research employs the well-established methodology[2-4], where physics is foremost over medicine and engineering. Patient symptoms were identified solely from this emphasis on higher science, which gives a rigorous analysis that cannot be achieved with the secondary fields on their own[e.g. 5-8]. Only then can serious consequences, including 15 h in a trauma bay ($\text{AIS} \gg 1$), be explained with specificity. [1] aaam.org/abbreviated-injury-scale-ais/; [2] Announcer, 26 (4), 42 (1996); [3] BAPS, 42, 2289 (1997); [4] Announcer, 27 (4), 100 (1997); [5] *.2005.MAR.U21.6; [6] *.2006.MAR.Y26.12; [7] *.2006.MAR.C1.102; [8] *.2007.MAR.K1.2 (* meetings.aps.org/link/BAPS)

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Date submitted: 06 Nov 2019

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