Groin Injuries in Motorcycle Accidents Abstract

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During the typical frontal crash, the motorcycle rider slides forward into the gas tank, handlebars, steering head, etc., with the prospect of groin contact and injury. One hundred seventeen of the 900 riders (13%) sustained some type of groin injury, overwhelmingly in frontal collisions involving another vehicle. About 5% of those 117 involved severe injuries such as pubic bone fractures, separation of pubic symphysis, scrotal and bladder lacerations. Motorcycle parts, especially the fuel tank, accounted for about 90% of the injuries. Fuel tank shape affected groin injuries. Fuel tanks whose upper surface rose smoothly from seat level appeared to minimize injury, while tanks that rose steeply in front of the seat increased injury. Also, riding posture appeared to affect groin injuries: leaning forward seemed to increase injury while upright and leaned-back postures seem to lessen injury severity.