

Bicycle-related injuries are a major concern in most of countries and head injuries is one of the unwanted results of bicycle use. The purpose of this study was to investigate characteristics of injuries in professional cyclists. Injury data over a period of a year (2009–2010) on 93 cyclists were retrospectively collected and analysed using  $\chi^2$ . In total, 117 injuries (1.2 injury per cyclist per year) were reported. The most common injury types were abrasions (63%) followed by contusions (23%) and strains (8%). Most of the injuries were located in the upper (47%) and lower extremities (47%). Knee (18%), wrist and palms (16%), shoulder and clavicle (16%), elbow (14%) and femur (14%) were the most common sites of injury. The number of collision injuries (92%) was significantly higher than that of non-collision injuries (8%) ( $p < 0.05$ ). Collision with other cyclists (39%) was the most important cause of bicycle injury ( $p < 0.05$ ) followed by sudden twist in front of other cyclists (13%), collision with obstacles in the road (11%) and loss of control or falls (9%). The number of minor injuries (92%) was significantly higher than that of moderate and severe injuries ( $p < 0.05$ ). The rate of injury was more than five times higher in competitions than in practices (85% vs 15%) ( $p < 0.05$ ). Injuries at the end of the race (50%) were more than at the initial or mid-race ( $p < 0.05$ ). Significantly more injuries were located in the right side of the body (71%) than the left side ( $p < 0.05$ ). The rate of injuries in normal road (91%) was more than those on uphill and downhill roads ( $p < 0.05$ ). It can be concluded that the rate of injury is 1.2 injuries per cyclist per year and abrasions and knee predominate even in these elite athletes.

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