

Clinical profile of patients with renal trauma: A cross-sectional observational study

Abstract

Background: Renal trauma is generally managed with conservative or surgical treatment. This study evaluated the clinicoradiological profile of renal trauma patients (Grades I–V) and their management to determine the association of grade of renal trauma with length of hospital stay and type of treatment. **Materials and Methods:** This cross-sectional prospective observational study included patients with renal trauma aged >18 years. All the study patients underwent computed tomography for identification and grading of renal injury (I–V). **Results:** A total of 121 patients with renal trauma were included in this study. The mean (standard deviation) age was 42.36 (17.95) years. The majority of the study patients ($n = 101$) were managed conservatively. Rib fracture ($n = 15$) was the most common associated injury, and the majority had unilateral renal injury ($n = 117$). The distribution of patients according to grades of renal trauma was 21 (17.35%) in Grade I; 32 (26.45%), Grade II; 25 (20.66%), Grade III; 38 (31.40%), Grade IV; and 5 (4.13%), Grade V. Length of hospital stay was ranging from 7 to 15 days, increasing with the severity of grades from Grade I to Grade V. Grade of renal trauma was positively correlated with length of hospital stay, respectively ($r = 0.390$, $P = 0.003$). Grade of renal injury ($P = 0.019$) and type of treatment ($P = 0.028$) significantly affected the variations in the length of hospital stay. **Conclusion:** Conservative treatment is the preferred management approach for renal trauma; grade of renal trauma and type of treatment are responsible for variation in the length of hospital stay.