

Neglected Polytrauma: Clinical Features and Management of Late-Referred Polytrauma

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Purpose: In Indonesia, a comprehensive trauma system is not yet established; therefore, polytrauma patients might not be sent directly to a trauma center. They might not have access to an ambulance with proper response time and equipment or were taken to the nearest hospital before being referred to a trauma referral center. The term neglected is proposed for those 2 categories. This study aims to describe the clinical pictures, management, and outcome of neglected polytrauma patients.

Methods: This is a single-center cross-sectional study using electronic medical records from January 2023 to May 2024 in a tertiary teaching hospital, also a trauma referral center. Polytrauma patients arrived in the hospital more than 2 hours after the initial injury was included. Polytrauma is defined according to the 2014 Berlin Consensus. Patient sex, age, mechanism of injury (MOI), time from injury to arrival, previous hospital, transport, and distance are recorded. Types and regions of injuries, severity, and physiologic parameters were also included. Outcomes measured were overall in-hospital mortality and mortality in the two categories.

Results: There were 38 subjects, mostly male (71%), average age 31.5 years (range, 4-73). Most common MOI was motor vehicle accidents (86.5%). Time from injury to arrival was 16.5 hours (range, 2-48), most have been treated temporarily in previous hospital (81.6%) and referred using ambulance (84.2%). Distance traveled was between 3 and 77 km. Overall mortality rate was 23.7%, with average ISS score of 27 (range, 17-59). The 2 categories showed similar ISS score and clinical parameters but among the group with prolonged direct ambulance transport to our hospital, 4 out of 7 died. In the other group receiving temporary treatment within 1 hour in another hospital before referral, 5 out of 31 died, although the median time is 22 hours (range, 5-48).

Conclusion: Overall mortality rate in neglected polytrauma is higher than all polytrauma mortality rates in other trauma centers. Those not receiving treatment within the first hour showed a greater proportion of death compared to those receiving initial treatment within 1 hour, although not in a trauma center. A trauma system should aim to abolish these neglected polytrauma cases.