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SURVIVAL OF MAJOR AND SEVERE TRAUMA PATIENTS TRANSFERRED TO TERTIARY CARE HOSPITAL BY AEROMEDICAL TRANSPORT

SURVIE DES PATIENTS TRAUMATISÉS MAJEURS ET SÉVÈRES TRANSFÉRÉS À L'HÔPITAL DE SOINS TERTIAIRES PAR TRANSPORT AÉRIEN

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Introduction: Major and severe trauma patients need timely management in designated trauma center for the best possible outcome. Aeromedical transport plays important role in trauma care in Thailand, by transferring seriously injured patients from local hospital to trauma center for higher level of care. We studied outcome of major and severe trauma patients transferred by air ambulance to Bangkok Hospital during 2014-2017.

Methods: Records of 949 trauma patients transferred to Bangkok Hospital during 2014-2017 were reviewed. Severity of trauma patients was classified by Injury Severity Score (ISS), major trauma defined by ISS 16-24, and severe trauma defined by ISS more than 24. The primary outcome is survival of major and severe trauma patients referred by aeromedical transport.

Results: 175 trauma patients were transferred by air ambulance as secondary mission. There were 28 major trauma cases and 39 severe trauma cases. Proportion of patients receiving aeromedical transport in major trauma group was 21.37%, and 24.22% in severe trauma group. All of 28 major trauma patients survived. 32 of 39 severe trauma patients survived, 82.06%. Overall survival of both major and severe trauma patients was 89.55%. Median ISS of non-survivors was higher than survivors. Common problems in severe trauma group, which were also the leading causes of death, were severe traumatic brain injury (TBI) and multiple organ failure (MOF) due to massive hemorrhage.

Conclusions: Overall survival rate of major and severe trauma patients receiving aeromedical transport in this study is acceptable. Survival of major trauma patients was significantly higher than severe trauma patients. Higher mortality rate in severe trauma patients likely to correlates with higher injury severity score, severe TBI and MOF.