ハイブリッド ER 導入による初期治療開始までの時間と 看護必要度の変化について

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BACKGROUND. Hybrid ER was devised in Japan in 2011 with the aim of reduction to move patients, early diagnosis and early intervention. The Hybrid ER is defined as the first care room with IVR-CT system, in order to perform diagnosis by CT and treatment by surgery or TAE on the same bed without moving patients. Previous studies have reported that the introduction of Hybrid ER significantly reduced mortality, hemorrhagic death and time to start CT and emergency treatment. These studies have been conducted from a doctor's perspective, but not from a nurse's perspective.

OBJECTIVE. The purpose of this study is to clarify the effectiveness of Hybrid ER by comparing the level of need for nursing care in patients before / after the introduction of Hybrid ER.

METHODS. A retrospective cohort study that contains the pre-introduction group (until the end of September 2017) and the post-introduction group (from November 2017), was conducted at a facility where the operation of Hybrid ER began in October 2017. Severe trauma patient's data, such as patient transport time, CT examination start time, presence / absence of FAST, IVR start time, and the level of need for nursing care during ISS and hospitalization, were extracted from electronic medical records.

RESULTS. 158 people were extracted in the pre-introduction group and 159 in the post-introduction group. The ISS score was 25.9 ($\pm$ 8.6) in the pre-introduction group, but 27.9 ($\pm$ 10.8) in the post-introduction group (P=0.0466). The average score of item A (the level of need for nursing care) in the EICU was 4.9 ($\pm$ 1.4) in the pre-introduction group, 4.7 ($\pm$ 1.2) in the post-introduction group (P=0.2647). The average score of item A in the EHCU was 3.7 ($\pm$ 1.4) in the pre-introduction group, 2.9 ($\pm$ 1.4) in the post-introduction group (P <0.0001).

CONCLUSIONS. The introduction of Hybrid ER has improved prognosis of severe trauma patients. Nurses have more time to interact with patients, which can lead to improved nursing quality.