

Decision making criteria for damage control surgery

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Resumo

INTRODUÇÃO

There are still many inquiries regarding the criteria for damage control surgery (DCS). The famous “deadly triad” could be useful with a high specificity, though its sensitivity is not as high to be universally used as an indication for DCS.

OBJETIVOS

Our objective was to propose an indication for the implementation of DCS in severe abdominal trauma requiring emergency surgery.

MATERIAIS & MÉTODOS

We used data from Japan Trauma Database (JTDB) and analyzed 4447 trauma patients who underwent emergency laparotomy. Of those patients, we compared the 532 patients that underwent DCS (DCS group), to the 3915 patients who underwent typical laparotomy (laparotomy group).

RESULTADOS

DCS group had significantly higher FAST positive ratio, higher use of blood transfusion, and worse mortality. In logistic regression model, heart rate, body temperature, conscious level (Glasgow Coma Scale), and type of injury (blunt or stab), were independent predictor for DCS. Using these predictors, we created the DECIDE score (Damage Control Indication Detecting Score). The DECIDE score, consisting of body temperature, consciousness, and type of injury, had a positive relationship with mortality in severe trauma patients requiring emergency laparotomy, and could be utilized in the critical decision making for the implementation of DCS. The DECIDE score, having 9 points total, had mortality of 30.8%, sensitivity of 64.8%, and specificity of 70.0% with a DECIDE score of 5 points. These categories of body temperature, consciousness, and type of injury, could be gathered with only pre-hospital information, not requiring any kind of exams. Using the DECIDE score, surgeons could possibly decide when to perform DCS in severe abdominal trauma patients requiring emergency surgery.

Palavras-chaves: damage control surgery, emergency laparotomy, indication