Predicting Cranial Computed Tomography Results of Head Injury Patients Using an Artificial Neural Network

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摘要

Abstract

We conducted this study to determine if artificial neural network modeling would predict cranial computed tomography results in head injury patients using different combinations of clinical variables. 150 consecutive patients admitted to a regional trauma center with head injury were enrolled in the study. The CT was labeled with presence of surgically significant intracranial hematoma (SSIH), if midline shift, obliteration of ambient cistern or basal cistern were found. The best performance of our models to differentiate normal from abnormal cranial CT and detection of SSIH was ideal.