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Poster presentation

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Predictors of positive CT scans in the elderly trauma patients with minor head injury. Case reports and review of the literature

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Background

The purpose of this study was to determine whether there were characteristics of the trauma patient with a minor head injury. Glasgow Coma Scale (GCS) of 13-15, that would predict a positive cerebral CT scan.

Materials and methods

An analysis of 300 patients with potential head injuries transported to our department was performed. The following characteristics were analyzed as possible predictors: 1. scene GCS, 2. emergency room GCS, 3. a change in GCS from scene to emergency room, 4. loss of consciousness, 5. focal neurological deficit.

Results

50 per cent (150/300) of the patients underwent CT scanning of the head. CT scans were positive in 5,3 per cent (16/300) of the total group and 10.6 per cent (16/150) of those who underwent CT scanning. In the patients without LOC and ER-GCS of 13-15, all CT scans were negative.

Conclusions

Of all the patients with positive CT scans, 4 underwent emergent craniotomy: 2 for a depressed skull fracture with underlying contusion, and 2 for a temporal bone fracture and an epidural hematoma. Both patients had LOC and SC-GCS and ER-GCS of 15. We present our cases and finally we performed a review of the literature.

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