

# Clinical outcomes of patients with penetrating gunshot wounds to the head

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**INTRODUCTION:** Penetrating craniocerebral gunshot wounds to the head are mostly firearm related injuries made as a result of homicide, accident fatalities and mostly suicide attempt. It is well know that the most common cause of mortality and morbidity among patients with penetrating head gunshot injuries are devastating injuries to the central nervous system and caniocerebral structures. Despite this negative prognosis, survival and recovery was observed.

**AIM:** To estimate clinical outcome and discuss about Glasgow coma score (GCS) as a possible predictive factor in patients with penetrating gunshot wounds.

**METHODS:** The record of 16 patients admitted in intensive care unit KBC Rijeka with a penetrating gunshot wound between 2009 and 2014 were retrospectively reviewed.

Gunshot wound to the head without brain injury was observed in 2 patients with a mild disturbance of consciousness(GCS 13-15). All 16 patients were artificially ventilated. All patients who were on artificial ventilation more then 8 days (31.2%) developed an infection which is monitored with elevated inflammatory parameters: Crp and leukocytes. Gunshot wounds to the head are in 75% result of suicide attempts. The highest number of patients was received in 2009 (8 of 16 patients, or 50 %).

**CONCLUSION:** Patients who have had a GCS less than 5, on receipt of the intensive care unit, had poorer treatment outcome compared to patients in whom there is a higher GCS at admission to the ICU. Assessment GCS score is an important prognostic factor in patients with gunshot head injury.

**Keywords:** GCS, penetrating wounds, gunshot

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