# **Evaluation of Prognostic Value of Brain CT scan in conservative** treatment of patients with intracerebral hemorrhage

## Introduction:

The term of cerebrovascular disease, indicates of any brain disorder that results from a pathologic process in brain blood vessels, that is, usually a small artery into brain parenchyma and makes a hematoma. ICH occurs in 15-20 percent of strokes. There are few studies about this subject and in most of studies, hematoma size have been considered more than hematoma volume. The aim of this study is to evaluate hematoma volume in patients with ICH undergone conservative treatment.

#### **Materials and methods:**

This study is a descriptive analytic evaluation. Urgent brain CT scan was requested for patients who turn to "Alavi hospital" with intracerebral hemorrhage and whom were diagnosed as intracerebral hemorrhage, intered to the study. Hematoma volume was detected by doing emergency CT scan. The results were analyzed by descriptive- analytic statistics in form of frequency tables and appropriate statistics tests.

## **Results:**

In this study, 61 patients with cerebral hematoma were evaluated that 62.3 percent were male with average age of  $64.55 \pm 11.04$  years. The putamen was the most common location of cerebral hemorrhage with 44.26 percent and Systolic hypertention with frequency of 52.4 percent was the most common risk factor. Results show that 40.9 percent of patients deteriorate in clinical status and 44.3 percent expired during hospitalization. Also presence of systolic hypertention, increase risk of death in patients, significantly.

Results showed that, there is a significant correlation between hematoma volume and patients prognosis. So that, as volume increases, prognosis get worse. Also it was observed that the best cut off to determine the prognosis of patients is hematoma volume of 40ml.

# **Conclusion:**

Results of this study showed that there is a significant correlation between brain hematoma volume with disease prognosis and mortality rate increases with volume increase.

**Key words:** CT scan, Intracerebral hematoma, Alavi hospital.