

## CHAPTER II

## LITERATURE REVIEW

Allen (1984) has studied a prognostic score in acute stroke patients and assessed their degree of social independence two and six months after acute stroke, by using a logistic regression model. He found that hemiparesis uncomplicated by hemianopia or higher cerebral dysfunction predicted a return to function independence. Rasmussen et al. (1992) have done a prospective study of prognostic factors important for survival from acute stroke. In this study 11 percent of the patients were found with ICH by CT Scan. Age, level of consciousness, and involvement of a temporal lobe in CT scan were the important prognostic factors regarding survival during the acute phase. Chamber et al. (1987) studied 1,013 patients with acute strokes. Clinical and laboratory examinations and CT scans were performed in all patients, the survival was found to be significantly longer after cerebral infarction than after cerebral hemorrhage. The 30day mortality rate was 57 percent in the supratentorial hemorrhage. The level of consciousness, forced conjugate gaze, advanced age, male sex, cardiac disease, and hypertension were established as adverse factors for recovery in the stroke patients. Helweg-Larsen et al. (1984) have done a retrospective study by review of charts and CT scans of 108 ICH cases. acute mortality of ICH was 27 percent and the immediate prognostic factors were the level of consciousness and the volume of the hematoma. The mortality rate was 90 percent if the hematoma was larger than 50 ml and 10 percent if the hematomas were smaller than that. Intraventricular hemorrhage was a bad prognostic sign

only in the basal ganglionic-thalamic hematomas. Steiner et al. (1984) have done a prospective study in 42 patients with ICH confirmed by CT scan within 12 hours after admission. Patients with evidence of head trauma and intracerebral tumor were excluded. The mortality rate was associated with loss of consciousness as a presenting symptom and extension of the bleeding into the ventricular system. Mortality was unaffected by the age of the patients and the size of ICH. Fieschi et al. (1988) studied 104 cases of ICH prospectively, the 30-day mortality rate was 30 percent. Age, state of consciousness and size of the hemorrhage on computed tomography scan were the reliable prognostic indicators. In Thailand, Poungvarin et al. (1990) has studied 93 cases of ICH between the age of 40-80 years old and found that the 21-day mortality rate was 50 percent. Statistically significant prognostic factors in this study were level of consciousness, hematoma size, extension of blood into the ventricles and hyperglycemia.