Cardiac surgery represents high risk factor in different neurological complication. Non-convulsive status epilepticus (NCSE) is an important treatment because of persistent coma after cardiac surgery. Manifestations of coma can be result of hypoxic brain damage. Up to 8% of patients in coma who have no outward signs of seizure activity are in non-convulsive status epilepticus.

Material and Methods: Under our observation there were 31 patients with persistent coma after cardiac surgery. The Patients underwent through the following types of cardiac surgery: coronary artery bypass graft surgery (CABG) in 26 patients, valve surgery - in 3 cases. In all cases we have used EEG study and CT scan. All patients have been undergone cardiopulmonary bypass (CPB) during cardiac surgery.

Results: In all cases we couldn't find acute cerebral damages on CT scan. EEG study in 6 patient elicited non convulsive status. There was shown focal and generalized epileptic activities on the EEG. In 2 cases there were nystagmoid eye jerking and facial muscles twitching, in 3 cases there were twitching of the limb, 1 patient didn't have any movement clinical symptoms.

Conclusion: Cardiac surgery might cause some neurological complication. Among them are non convulsive epileptic status. Early diagnosis of NCSE is very impotent in patient with persistent coma. Outlet of coma depends on timely treatment of this complication. Every patient with persistent coma after cardiac surgery need EEG observation.