Subjects and Methods: At the period 2000-2016 at the Department of Psychoneurology N2, Russian Children Clinical Hospital and Department of Child Neurology, Neurosurgery and Medical Genetics, Russian National Research Medical University were observed 11 patients with Down syndrome (7 boys and 4 girls). Nine children with classic variant (47,XX,+21) and one boy with mosaicism (46, XX/47,XX,+21). Results: Age of epilepsy onset varies from 1,5 month to 4 years (8 month at the average), in 10 from 11 patients (90,9%) before 1 year of life. The most part of patients with DS presented West syndrome (n=7, 63,6%), 3 patients with Markand-Blume-Ohtahara syndrome or severe epilepsy with multifocal independent spike foci – SE-MISF (27,3%) and one girl with focal frontal lobe epilepsy, Lennox-Gastaut-like phenotype (9,1%). West syndrome was characterized by flexor and flexor-extension tonic spasms, serial and single. SE-MISF characterized of combination of tonic spasms, ophthalmo-tonic, myoclonic and versive tonic seizures. Lennox-Gastaut-like phenotype – with pseudo-generalized tonic axorhizomelic and myoclonic seizures. Clinical remission was observed in 6 of 11 patients with DS (54,5%), significant decreasing of seizures (75%) – in 4 (36,4%) of children and moderate decreasing - in 1 (9,1%). Conclusion: Epileptic seizures in DS predominantly had manifestation in infancy (90,9%). Epilepsy had predominantly good prognosis (complete remission of seizures in 54,5% and significant decreasing of seizures – in 36,4% of cases). The most effective drugs were valproates in monotherapy and in combination with ethosuximide, lamotrigine, benzodiazepines and barbiturates.