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Use of ACTH and Prednisolone with Infantile Spasms: The Experience of the Country of Uzbekistan

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ABSTRACT

Infantile spasms (IS; West syndrome) is a severe form of epilepsy, a characteristic EEG appearance called hypsarrhythmia, and a high risk of severe developmental delay are other features of the syndrome. Seizures usually begin in the first year of life, often between 3 and 8 months of age. Seizures are difficult to treat, and the long-term outcome for seizure control and child development remains poor. Due to low response rates worldwide, a wide range of drugs are being used to treat IS. However, the two commonly used forms of therapy are adrenocorticotropic hormone (ACTH) and prednisone (or prednisone) for the treatment of infantile spasms (IS) in West syndrome. Potentially key early contacts for families are pediatric neurologists, pediatricians, and other pediatric healthcare professionals who have I have a child with West Syndrome. In many countries, ACTH is expensive and difficult to obtain, while the drug prednisone or prednisone is cheap, taken orally and readily available.

Objectives of the study: is to compare the effectiveness and cost of ACTH and Prednisolone in a retrospective analysis of data for the treatment of West Syndrome from the point of view of our country.

Research objectives and methods: The study included patients with the syndrome who were admitted to the TashPmi Children's Clinic in the period from January 2018 to December 2022. The diagnosis was made taking into account age, a history of disease picture Hypsarrhythmias on the EEG. Parents were asked to use either IM ACTH or oral prednisone. ACTH was expensive and difficult to obtain, while prednisone was cheap and readily available.

Results: The study included 105 children. Of these, boys consisted of 63 people aged from 3 months to 3 years, on average 6-9 months. 33 patients received ACTH injections; 27 showed improvement and 11 remained free of spasms after stopping the injections. Seventy-two patients received oral prednisolone, 51 responded, and 17 remained spasm-free after stopping oral glucocorticosteroids. The end result was the same in both groups. The cost of the first drug in the form of an injection of ACTH was more than 100 times higher than the cost of the second oral prednisolone.

Conclusions: The final results showed that there was no significant difference between the two treatment groups. Since the drug prednisolone is inexpensive and readily available and taken, it was ultimately concluded that it is the preferred therapy for the treatment of IS in West syndrome.

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