Türk Pediatri Arşivi
Turkish Archives of Pediatrics

Editorial

Febrile seizures and related epileptic syndromes

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Cite this article as: Saltık S. Febrile seizures and related epileptic syndromes. Turk Pediatri Ars 2018; 53(4): 203-4.

Febrile seizure (FS) is the most common type of seizure observed in infancy and childhood. Febrile seizure is defined as seizures observed in association with fever in the absence of central nervous system infection or other acute symptomatic cause in children aged between 3 months and 6 years who have never had any afebrile seizure. The diagnosis is based on clinical findings and exclusion of other causes. In patients presenting with febrile seizure, the type of the febrile seizure is primarily differentiated to specify investigations, treatment and prognosis. Seizures that are generalized, last shorter than 15 minutes, do not recur in 24 hours and/or do not lead to postictal neurological deficit are simple febrile seizures. The diagnosis of complicated febrile seizure is made, if the seizure involves at least one of the following characteristics: (a) Focal, (b) lasting for longer than 15 minutes, (c) recurring in 24 hours and/or leading to postictal neurological deficit (Todd paralysis etc.).

The risk of developing epilepsy in children with a history of febrile seizure is slightly increased (about 5%). However, one should be cautious in terms of investigations and follow-up in these patients, because it is known that complicated febrile seizure is an important risk factor for epilepsy. Other risk factors reported include a positive family history of epilepsy, a short time between the onset of fever and the seizure, late-onset febrile seizure (after the age of 3 years), frequently recurring febrile seizure and having seizure with a body temperature below 39 C^0.

The first seizure of epilepsy may be triggered by fever and FS has been associated especially with some epileptic syndromes. These syndromes include mesial temporal sclerosis (temporal lobe epilepsy), Dravet syndrome, febrile seizure plus generalized epilepsy (GEFS+) and myoclonic astatic epilepsy.

In recent years, genetic mechanisms in the etiopathogenesis of epilepsy has become one of the current areas of investigations. The role of pathologies occuring with ion channel gene mutations has been shown in the process of epileptogenesis. A portion of these genetic epilepsies are associated with febrile seizure, and mutations in the genes regulating the synthesis of voltage-dependent sodium channels (SCN1A, SCN1B) have been shown in these epilepsies. A case report by Tunçer et al. related to this issue ("A case of Dravet syndrome with newly defined mutation in the SCN1A gene") is included in this issue of our journal. Recognizing an epileptic syndrome is important in terms of specifying the prognosis as well as directing treatment.

Although simple febrile seizures have a very good prognosis, the prognosis is poor in Dravet syndrome which is a genetic epileptic syndrome starting with the characterstics of complicated febrile seizure. It is characterized by devastations in developmental motor, mental and language areas and behavioral and social problems. In this context, I would like to remind you the "International Day of Persons with Disabilities, 3 December".

A disabled person is defined as a person who needs protection, care, rehabilitation, consultancy and supportive services in order to cope with the social life and

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DOI: 10.5152/TurkPediatriArs.2018.86458

meet daily requirements as a result of loss of physical, mental, psychological, sensory and social abilities with various degrees because of a congenital or acquired cause. In medicine, we address this state of disability as a problem and try to correct it. However, in the social model, not the disability, but the "environmental, physical, spatial conditions and social attitudes" which render the individual disabled, are problematized and one tries to correct these conditions. December the 3rd was announced as the "International Day of Persons with Disabilities" in order to draw attention to the problems experienced by disabled people.

I wish you healthy days and times when we can share life with diasabled people and eliminate all obstacles.

References

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