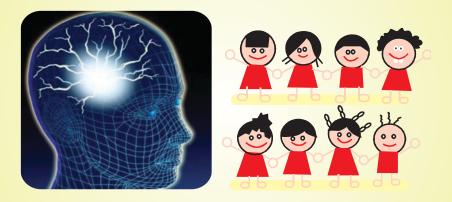


PARENTS / PATIENT EDUCATION GUIDE



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What is a seizure ?

It is commonly known as convulsions/fits/jhatka/chamki/daura. It commonly presents with abnormal jerking of the entire body or one side of the body, abnormal deviation of eyes/face, abnormal sensations, transient loss of consciousness, bizarre behavior, blank stare or excessive `day dreaming'.



What causes seizure ?

It is caused by excessive abnormal activation of brain cells called neurons. It does not occur due to `possession by evil spirit' (as some people believe) !

What is a febrile seizure ?

Children with ages between 1 month to 6 years may have a seizure when they have a fever due to any cause. During the seizure your child may become stiff or floppy, become unconscious or unaware of their surroundings and have jerking or twitching movements.

What causes a febrile seizure ?

The febrile seizure occurs when the normal brain activity is disturbed by a fever. This is possibly because young children have immature brains susceptible to seizures caused by fever. Sometimes, this propensity to have seizures during fever runs in families.

What should I do when my child has seizure ?

Some Do's and Don'ts are given below:

Do's	Don't
 Stay calm. Stay with your child. If possible, note the time the seizure starts and ends. Loosen tight clothing. Roll your child onto his side into the recovery position. (see figure1) Move your child away from potentially harmful objects eg. Furniture with sharp corners,water/fire sources. Place something soft under your child's head to stop their head hitting the floor. Wipe off any secretions from nose and mouth. 	 Do not panic. Do not try to hold or restrain your child. Do not put anything in your child's mouth Do not try to put your child into cool or lukewarm water to cool off.



Figure 1 : Recovery position

What should be done at home to stop a seizure?

Remember, most seizures will stop within seconds or a couple of minutes without any medical treatment. Medications may need to be given if the seizure persists > 4-5 minutes. Commonly medications like midazolam or diazepam are used for this purpose. They can be given through various routes. You can use any of the following two ways to stop a seizure:

Steps to give Intranasal midazolam

- Put the child in recovery position as demonstrated in figure 1.
- Gently insert the nozzle of the spray bottle into one of the nostrils of the child. (Fig. 2a)
- 3. Press down on the nozzle to deliver the required number of puffs (as advised by the doctor) to each nostril.
- If nasal spray not available, Injection Mindazolam (i/v 1mg/ml or 5mg/ml) can be used to administer required dosage through nostril drop wise as per the advice of your doctor. (Fig. 2b)

Figure 2b : Midozolam Injection



Figure 2a : Nasal Spray



Steps to give Buccal Mindazolam

- The appropriate dose of the drug will be advised to you by the doctor. Take a 2 ml syringe with needle attached. Insert the needle (with syringe attached) into vial/ ampoule. Turn the bottle upside down and draw out the amount prescribed by your doctor. Turn the bottle upright and remove the syringe. Remove any air bubbles. Remove the needle.
- 2. Put the child on his side (as in recovery position-figure1).
- 3. Gently place the syringe (without the needle) into the space between the child's teeth and their cheek (Fig 3). Use the side closet to the floor.

Once the syringe is in place slowly push the plunger down to squeeze out the medicine.

 Hold the child's lips together on that side for a minute or two to prevent leakage. It will take 3-5 minutes to work because it has to be absorbed into the bloodstream.



Figure 3 : Buccal Midazolam

Steps to give per rectal Diazepam suppository

- The appropriate dose of the suppository will be advised to you by the doctor.
- 2. Carefully take the suppository out of the wrapper.(Figure 4)
- 3. Put the child on his side (as in recovery position-figure 1). Bend the knees onto the chest. (Figure 5)
- 4. Insert the suppository into anus.
- 5. Hold buttocks together for 2 minutes.

It will take between five and eight minutes to work because it has to be absorbed into the bloodstream.







Can my child get another seizure the next time he/she has fever?

Yes, it is possible. The chance of having a second febrile seizure in the following year is 30%, but this means that 70% (or 7 out of 10 children) will not have another seizure.

The risk of another seizure reduces every year and it becomes extremely rare after children turn 6 years old.

What should I do when my child develops fever in the future?

To reduce the fever, you can use medicines, such as paracetamol as directed by your doctor. Remember *these medicines do not prevent the seizure from occurring.* Remember that these medications will make your child feel better from the fever but they do not treat the infection that caused the fever.



Are any tests required for diagnosis?

Usually no tests are done. If your child is below 18 months of age or there is suspected meningitis (brain infection), the doctor may advise for a lumbar puncture (a small needle is inserted at the back to collect the fluid which surrounds

the brain and spinal cord). This is to look for any infection of the brain which may be missed while examining small children. Rarely EEG or a CT scan may be advised. Investigations to look for cause of fever may also be advised by your doctor as per the case.

Are there any other medications available to prevent febrile seizures?

Yes, but these medications have to be taken every day and they can have many unwanted side effects. Because the outlook for children with febrile seizures is so good, these regular medications are rarely necessary. Sometimes, intermittent anti-covulsant therapy is prescribed; i.e. anticonvulsants are given to the child for 2-3 days every time he has fever till 5 years of age. However this therapy is prescribed only in some situations and your doctor will advise you regarding these.

Will my child have epilepsy in future?

Usually the febrile seizures stop occurring after an age of 5 years. Only 1-2 in 100 children with febrile seizures go on to develop epilepsy. Especially children with underlying neurological problem, family history of epilepsy and atypical febrile seizures are at increased risk to develop epilepsy.



Child Neurology OPDs	Tuesday & Friday 9 a.m. onwards	Room No.4, 5, 14
Development Clinic	Monday 2 p.m. onwards	Room No.5
Neurocysticercosis Clinic	Monday 2 p.m. onwards	Room No.11
Pediatric Neurology Clinic	Wednesday 2 p.m. onwards	Room No.3, 4, 5
Autism Clinic	Thursday 9 a.m. onwards	Room No.12, 13, D
Neuromuscle Disorders Clinic	Friday 2 p.m. onwards	Room No.3, 4

For any queries please contact

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