# **MSK Kids**

#### PATIENT & CAREGIVER EDUCATION

# Valproic Acid and Derivatives

This information from Lexicomp® explains what you need to know about this medication, including what it's used for, how to take it, its side effects, and when to call your healthcare provider.

# **Brand Names: US**

Depakote; Depakote ER; Depakote Sprinkles

#### **Brand Names: Canada**

APO-Divalproex; APO-Valproic Acid; Depakene; Epival; JAMP-Valproic Acid; MYLAN-Divalproex; ODAN-Valproic Acid; PMS-Valproic; PMS-Valproic Acid

# Warning All products:

- Liver problems have happened with this drug. Sometimes, these have been deadly. Most of the time, liver problems happened within the first 6 months after starting this drug. Sometimes they did not go back to normal after this drug was stopped. Call your child's doctor right away if your child has signs of liver problems like dark urine, tiredness, decreased appetite, upset stomach or stomach pain, light-colored stools, throwing up, or yellow skin or eyes. In people who have seizures, loss of seizure control may happen.
- Have blood work checked as you have been told by the doctor. Talk with the doctor.
- Children under 2 years are at greater risk of deadly liver problems.
   Those who take more than 1 seizure drug or who have a metabolic disorder, a very bad seizure disorder along with mental retardation, or

certain brain problems are at highest risk. Talk with the doctor.

- There is a greater risk of liver failure and death in patients who have a
  genetic liver problem caused by a mitochondrial disorder like Alpers—
  Huttenlocher syndrome. Your child may need to have a genetic test to
  check for this health problem. If your child has or may have
  mitochondrial disorders do not give this drug before talking with your
  child's doctor.
- This drug may cause severe and sometimes deadly pancreas problems (pancreatitis). This could happen in children at any time during treatment with this drug. Signs of pancreatitis include stomach pain, upset stomach, throwing up, or decreased appetite. Call your child's doctor right away if your child has any of these signs.

## If your child is or may be sexually active:

• If your child is pregnant or able to get pregnant, talk with the doctor to make sure this drug is right for your child. She must use birth control to prevent pregnancy while taking this drug.

# If your child is or may be pregnant:

- This drug may cause severe birth defects if your child takes it while pregnant. It can also cause the baby to have a lower IQ and may raise the risk of autism or ADHD. If your child gets pregnant while taking this drug, call your child's doctor right away.
- Do not give this drug to prevent migraine headaches if your child is pregnant or is not using birth control to prevent pregnancy.

# All oral products:

 This drug comes with an extra patient fact sheet called a Medication Guide. Read it with care each time this drug is filled. If you have any questions about this drug, please talk with the doctor, pharmacist, or other health care provider.

# What is this drug used for?

- It is used to treat seizures.
- It is used to prevent migraine headaches.
- It is used to treat bipolar disorder.
- It may be given to your child for other reasons. Talk with the doctor.

# What do I need to tell the doctor BEFORE my child takes this drug?

- If your child is allergic to this drug; any part of this drug; or any other drugs, foods, or substances. Tell the doctor about the allergy and what signs your child had.
- If your child has any of these health problems: Liver disease or a urea cycle disorder.

This is not a list of all drugs or health problems that interact with this drug.

Tell the doctor and pharmacist about all of your child's drugs (prescription or OTC, natural products, vitamins) and health problems. You must check to make sure that it is safe to give this drug with all of your child's other drugs and health problems. Do not start, stop, or change the dose of any drug your child takes without checking with the doctor.

# What are some things I need to know or do while my child takes this drug?

# For all uses of this drug:

- Tell all of your child's health care providers that your child is taking this drug. This includes your child's doctors, nurses, pharmacists, and dentists.
- Have your child avoid tasks or actions that call for alertness until you see how this drug affects your child. These are things like riding a bike, playing sports, or using items such as scissors, lawnmowers, electric scooters, toy cars, or motorized vehicles.

- Have blood work checked as you have been told by the doctor. Talk with the doctor.
- Alcohol may interact with this drug. Be sure your child does not drink alcohol.
- Talk with your child's doctor before your child uses marijuana, other forms of cannabis, or prescription or OTC drugs that may slow your child's actions.
- This drug may affect certain lab tests. Tell all of your child's health care providers and lab workers that your child takes this drug.
- If your child is not able to eat or drink like normal, talk with your child's doctor. This includes if your child is sick, fasting, or having certain procedures or surgery.
- Some brands of this drug have peanut oil in them. If your child is allergic to peanuts, check with your pharmacist to see if your child's brand has peanut oil in it.
- Your child may bleed more easily. Make sure your child is careful and avoids injury. Be sure your child has a soft toothbrush.
- High blood levels of ammonia have happened with this drug. This can lead to certain brain problems. In some people, this has been deadly. Talk with the doctor.
- Some people have had certain brain problems without high blood levels of ammonia. Sometimes, these brain problems have gone back to normal after this drug was stopped. However, sometimes they have not fully gone back to normal. Talk with the doctor.
- A severe and sometimes deadly reaction has happened. Most of the time, this reaction has signs like fever, rash, or swollen glands with problems in body organs like the liver, kidney, blood, heart, muscles and joints, or lungs. If you have questions, talk with the doctor.
- This drug may affect being able to father a child. Talk with the doctor.

# If your child is breast-feeding a baby:

• Tell the doctor if your child is breast-feeding a baby. You will need to talk about any risks to the baby.

#### For seizures:

• If seizures are different or worse after starting this drug, talk with the doctor.

# What are some side effects that I need to call my child's doctor about right away?

WARNING/CAUTION: Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your child's doctor or get medical help right away if your child has any of the following signs or symptoms that may be related to a very bad side effect:

- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.
- Signs of infection like fever, chills, very bad sore throat, ear or sinus pain, cough, more sputum or change in color of sputum, pain with passing urine, mouth sores, or wound that will not heal.
- Signs of high ammonia levels like a heartbeat that does not feel normal, breathing that is not normal, feeling confused, pale skin, slow heartbeat, seizures, sweating, throwing up, or twitching.
- Chest pain.
- Swelling in the arms or legs.
- Change in eyesight.
- Memory problems or loss.
- Change in balance.
- Trouble walking.
- Any unexplained bruising or bleeding.

- Purple spots or redness of the skin.
- Not able to pass urine or change in how much urine is passed.
- Muscle pain or weakness.
- Joint pain or swelling.
- Shakiness.
- Not able to control eye movements.
- Ringing in ears.
- Feeling cold.
- Like other drugs that may be used for seizures, this drug may rarely raise the risk of suicidal thoughts or actions. The risk may be higher in people who have had suicidal thoughts or actions in the past. Call the doctor right away about any new or worse signs like depression; feeling nervous, restless, or grouchy; panic attacks; or other changes in mood or behavior. Call the doctor right away if any suicidal thoughts or actions occur.
- A very bad reaction called angioedema has happened with this drug. Sometimes, this may be life-threatening. Signs may include swelling of the hands, face, lips, eyes, tongue, or throat; trouble breathing; trouble swallowing; or unusual hoarseness. Get medical help right away if your child has any of these signs.
- Severe skin reactions may happen with this drug. These include Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), and other serious reactions. Sometimes, body organs may also be affected. These reactions can be deadly. Get medical help right away if your child has signs like red, swollen, blistered, or peeling skin; red or irritated eyes; sores in the mouth, throat, nose, eyes, genitals, or any areas of skin; fever; chills; body aches; shortness of breath; or swollen glands.

# What are some other side effects of this drug?

All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your child's doctor or get medical help if any of these side effects or any other side effects bother your child or do not go

#### away:

- Headache.
- Constipation, diarrhea, stomach pain, upset stomach, throwing up, or decreased appetite.
- Increased appetite.
- Stomach burning, fullness, or bloating after eating.
- Feeling dizzy, tired, or weak.
- Trouble sleeping.
- Weight gain or loss.
- Hair loss.
- Feeling nervous and excitable.
- Flu-like signs.

These are not all of the side effects that may occur. If you have questions about side effects, call your child's doctor. Call your child's doctor for medical advice about side effects.

You may report side effects to your national health agency.

# How is this drug best given?

Give this drug as ordered by your child's doctor. Read all information given to you. Follow all instructions closely.

# All oral products:

- Give this drug with or without food. Give with food if it causes an upset stomach.
- Keep giving this drug to your child as you have been told by your child's doctor or other health care provider, even if your child feels well.
- Do not stop giving this drug to your child all of a sudden without calling the doctor. Your child may have a greater risk of seizures. If your child needs to

- stop this drug, you will want to slowly stop it as told by the doctor.
- If your child takes cholestyramine, you may need to give it at some other time than this drug. Talk with the pharmacist.

### Tablets and capsules:

- Have your child swallow whole. Do not let your child chew, break, or crush.
- Give this drug with a full glass of water.
- If your child has trouble swallowing, talk with the doctor.

## Long-acting tablets:

• If you or your child see parts of this drug in your child's stool, call the doctor.

### Sprinkle capsules:

- Your child may swallow whole or you may mix the contents of the capsule with certain foods like applesauce. Have your child take the mixture right away. Do not store for later use.
- Do not let your child chew the mixture.
- If you or your child see parts of this drug in your child's stool, call the doctor.

# Liquid:

 Measure liquid doses carefully. Use the measuring device that comes with this drug. If there is none, ask the pharmacist for a device to measure this drug.

### Injection:

• It is given as an infusion into a vein over a period of time.

# What do I do if my child misses a dose? All oral products:

- Give a missed dose as soon as you think about it.
- If it is close to the time for your child's next dose, skip the missed dose and go back to your child's normal time.
- Do not give 2 doses at the same time or extra doses.

### Injection:

• Call your child's doctor to find out what to do.

# How do I store and/or throw out this drug? All oral products:

• Store at room temperature in a dry place. Do not store in a bathroom.

## Injection:

• If you need to store this drug at home, talk with your child's doctor, nurse, or pharmacist about how to store it.

## All products:

- Keep all drugs in a safe place. Keep all drugs out of the reach of children and pets.
- Throw away unused or expired drugs. Do not flush down a toilet or pour down a drain unless you are told to do so. Check with your pharmacist if you have questions about the best way to throw out drugs. There may be drug take-back programs in your area.

# General drug facts

- If your child's symptoms or health problems do not get better or if they become worse, call your child's doctor.
- Do not share your child's drug with others and do not give anyone else's

drug to your child.

- Some drugs may have another patient information leaflet. If you have any questions about this drug, please talk with your child's doctor, nurse, pharmacist, or other health care provider.
- If you think there has been an overdose, call your poison control center or get medical care right away. Be ready to tell or show what was taken, how much, and when it happened.

#### Consumer Information Use and Disclaimer

This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific patient. It is not intended to be medical advice or a substitute for the medical advice, diagnosis, or treatment of a health care provider based on the health care provider's examination and assessment of a patient's specific and unique circumstances. Patients must speak with a health care provider for complete information about their health, medical questions, and treatment options, including any risks or benefits regarding use of medications. This information does not endorse any treatments or medications as safe, effective, or approved for treating a specific patient. UpToDate, Inc. and its affiliates disclaim any warranty or liability relating to this information or the use thereof. The use of this information is governed by the Terms of Use, available at https://www.wolterskluwer.com/en/know/clinical-effectiveness-terms.

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If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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