

### What is a Kidney stone?

A kidney stone is a solid piece of material that forms in a kidney. Kidney stones vary in size and may stay in the kidney or travel down to the bladder. A small stone may pass on its own, causing little or no pain. A larger stone may get stuck along the ureter (tube connecting kidney to the bladder), causing severe pain and or bleeding.

### What causes kidney stones?

Kidney stones are caused by high levels of calcium, oxalate and phosphorus in the urine. Some foods may cause kidney stones in certain people. You may be more likely to get a kidney stone if you have:

- A family history of kidney stones
- Frequent urinary tract infections
- Blockage of your urinary tract (which is more likely in pregnancy because of the pressure of the baby on your kidneys)
- Digestive problems
- You do not drink enough fluids
- People with type 2 diabetes are more likely to develop a kidney stone

#### What are the symptoms of a kidney stone?

- Pain with urination
- Blood in your urine
- Sharp pain in your back and/or lower abdomen. This pain may last for a short or long time. You may have nausea and vomiting with the pain

## What is the treatment for kidney stones?

The treatment for kidney stones usually depends on their size. Most kidney stones will pass on their own, but you may still need treatment for pain, IV fluids if you are dehydrated and medicine for nausea and vomiting. If you have a large stone that will not pass or is blocking urine from your kidney, you may need surgery by a doctor who specializes in this problem (urologist). The urologist can remove the stone or use a machine called a "shock wave lithotripsy" to break up the stone into small pieces so it can pass. This is done under anesthesia and moms and babies tolerate this procedure well.

You have been given the following medications to take for your kidney stones:

# What can I do to prevent kidney stones?

- Drinking enough fluids each day is the best way to avoid getting kidney stones. Drink 8-10 glasses of water and other fluids per day
- Decreased your salt intake. No added salt to your food and avoid highly processed packaged foods. Fresh is best!
- Decrease the amount of animal protein in your diet.
- Calcium is important in pregnancy, but if you have kidney stones, you should watch your intake.

# When do I need to call my health care provider?

Call triage (734) 764-8134 if you have any of the following signs and symptoms;

- Temperature over 100.4F
- Back or abdominal pain that is not controlled by pain medicines
- Bright red blood in your urine
- Nausea and vomiting not controlled by medication

- Vaginal bleeding or watery discharge
- Painful contractions or cramping of more than 4 per hour
- Decreased fetal (baby) movement.

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

> Author: Bailey, Joanne CNM PhD, Reviewers: Getty, Barbara CNM MS, Crane, Patricia RNC MS

Patient Education by <u>Michigan Medicine</u> is licensed under a <u>Creative Commons Attribution</u> <u>NonCommercial-ShareAlike 4.0 International Public License</u>. Last Revised 03/2021