

Cardiorenal syndrome

When the heart and kidneys affect each other

A problem in the heart can make the kidneys worse, and the reverse. Your heart and kidney teams work together to protect both.

What is it?

The heart pumps blood to the kidneys, and the kidneys control how much salt and water is in your body. When the heart is weak (heart failure), the kidneys get less blood flow and fluid backs up into them. The kidneys then hold on to more salt and water, which strains the heart even more. Kidney disease can also strain the heart.

What you might notice

- shortness of breath, especially lying flat or when active
- swelling in your legs, ankles or belly
- quick weight gain from fluid
- feeling very tired, or passing less urine

How it's found

- blood tests for kidney function, potassium and heart strain
- a heart ultrasound (echocardiogram)
- your daily weights and symptoms

How it's treated

Treatment balances removing extra fluid with keeping enough blood flowing to the kidneys.

- **Water pills (diuretics)** remove extra salt and water. The dose often changes over time.
- **Heart failure medicines** help the heart work better. Some also protect the kidneys.
- Your kidney blood test may change a little when fluid is removed or a heart medicine is started. This is often expected. Don't stop any medicine on your own.
- If medicines aren't enough, some people need another way to remove fluid, such as dialysis.

What you can do

- Weigh yourself every morning after using the bathroom and before eating. Write it down.
- Call your team if you gain more than 1 kg (2 lb) in a day or 2 kg (5 lb) in a week, or the amount your team gave you.
- Eat less salt and follow any fluid limit you've been given.
- Avoid anti-inflammatory pain relievers (NSAIDs). They can worsen heart failure and kidney function.

Call 911 if you have

- severe shortness of breath, or trouble breathing at rest
- chest pain or pressure, fainting, or a very fast or irregular heartbeat

Learn more: Heart & Stroke, heartandstroke.ca. Kidney Foundation of Canada, kidney.ca.

General information only. This sheet doesn't replace advice from your own health care team. In an emergency, call 911 or go to the nearest emergency department.

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