

Autonomic Dysreflexia (A.D.)

Autonomic dysreflexia (A.D.) can happen if you have a spinal cord injury above the T6 level. It is most common in the first year after the injury but can happen throughout your lifetime. It occurs when something causes irritation below the spinal cord level of injury. A warning signal travels up the spinal cord, but it is blocked at the level of injury. This starts a “fight or flight” response. It will cause blood pressure to increase until the irritant is removed. A.D. can be life-threatening.

Causes

- Bladder: full bladder (most common cause), bladder infections and kidney stones
- Bowel: stool in the rectum (second most common cause), hemorrhoids
- Skin: pressure sores, burns, tight-fitting clothing, ingrown toenails, pinched skin
- Other: sitting on a foreign object, pregnancy/labor, sex, incorrect positioning, fractures, or stomach ulcers

Symptoms

- Rapid rise in blood pressure
- Slowed heart rate
- Headache –sudden and may be “pounding”
- Blotching or flushing of the skin
- Unexplained sweating above the level of injury
- Chills, goose bumps
- Stuffy nose
- Nausea
- Acting nervous or anxious
- Blurred vision
- Few or no symptoms (silent autonomic dysreflexia)

Blood Pressure Changes

Even a small increase in the blood pressure of 20 mmHg or more can signal A.D. A small increase in blood pressure might be normal for some people, but could be harmful for someone with A.D. We suggest that you have your blood pressure taken every year so that you will know what your normal or baseline blood pressure is.

Ask your care team if you should have a blood pressure cuff at home. They can teach you how to use one.

Treatment

Do not ignore the symptoms of A.D.! If you have signs of A.D., the best thing to do is locate and remove the irritant. Think about all causes and follow the steps below.

1. Sit upright at a 90-degree angle and lower the legs. Blood pressure will drop.
2. Loosen all tight clothing, like elastic stockings and binders.
3. Empty your bladder. Use lidocaine jelly (if indicated) to help numb the body’s reaction to the catheter.
 - If on an intermittent catheter program, insert the catheter now. If the volume is more than 500ml, clamp off tube and wait 10 minutes. Then keep going.
 - If using a Foley catheter, check for kinks in the tubing. If no kinks are found, change the Foley since it might be clogged.
 - Check for a full urine drainage bag and empty.

4. Check your bowel for stool. Insert lidocaine jelly or lubricant into the rectum before checking the rectum for stool. Remove stool, if present. Do not use digital stimulation.
5. Check your skin and your position. Look for skin being pinched, clothing too tight and pressure areas or broken bones. Check for wrinkles or lumps to clothing or bedding.
6. If you are prone to A.D., your doctor may give you a medicine to control the symptoms until we figure out the source of A.D. Make sure you know how and when to take this medicine.

If these methods do not relieve symptoms, call your provider right away or go to the nearest emergency room. A.D. can be life-threatening and needs to be taken care of quickly.

If you have any questions or concerns, please talk to your healthcare team.

Carry a card listing the signs, symptoms, and treatment for A.D. with you at all times since you may not be able to direct your care during the crisis. Please cut out the card below. It can be folded to fit in your wallet.



Autonomic dysreflexia (A.D.) is a medical emergency. It occurs with a spinal cord injury of T6 or above, causing high blood pressure that may be life threatening.

Causes: Full bladder (90% of cases), full bowel, pressure ulcer, bone fractures, infections, sex, tight clothing or shoes, blood clots, pregnancy or labor, bladder/kidney stones, internal injuries (ulcers, appendicitis).

Symptoms: Severe headaches, high blood pressure, slowed heart rate, flushed face, goose bumps, sweating above level of injury, stuffy nose.

Treatment: Sit up at 90°, check blood pressure, empty bladder using lidocaine jelly on the catheter, or check Foley/condom catheter for kinks or clogs.

If blood pressure remains high:

- Check rectum for stool--use lidocaine jelly.
- Check for skin sores or injury to skin or other parts of the body.
- Take medicine as directed (e.g. Nitro paste) to lower blood pressure and keep looking for the source.

If the source can't be found and blood pressure remains high, call your provider or go to the nearest emergency room.

