For the Physician

Autonomic Dysreflexia (AD)

Treatment recommendations:

- Sit patient upright (90 degrees).
- Monitor BP every 2-3 min.
- Quick exam to include abdomen for distended bladder/bowel and any other organ system below the level of injury that can be the source of dysreflexia.
- If an indwelling urinary catheter is not in place, catheterize the individual. If indwelling catheter is in place, check system for kinks, folds, constrictions, or obstructions.
- If systolic BP >150, give an antihypertensive with rapid onset and short duration while causes of AD are being investigated.
    - Nitro Paste—1", apply every 30 min, topically above level of injury, wipe off when BP stable, reapply as needed. Hold if patient has taken PDE5 inhibitors (i.e. Viagra, Cialis, etc.) within 24 hours.
    - Nifedipine IR (if unable to use)—10mg per dose, sublingual form or chewed, may repeat every 20–30 min PRN.
    - Hydralazine: (If unable to use the above)—10mg and repeat PRN.
- Monitor symptoms and BP for at least 2 hrs after the resolution of an AD episode.
- AD can lead to seizures, stroke, or death!

QR Code to the Clinical Practice Guidelines

Created by UC Davis Department of Physical Medicine & Rehabilitation

Design and information based of the Christopher & Dana Reeve Foundation Paralysis Resource Center Autonomic Dysreflexia Wallet Card

What is it?

Autonomic Dysreflexia (AD) is a sudden increase in blood pressure, 20-40 mm Hg systolic higher than usual, resulting from harmful, painful, or injurious stimuli applied below neurologic levels in persons with a spinal cord injury (SCI). Someone normotensive may have AD if their baseline SBP is in the 90s.

This condition, which is caused by massive unopposed sympathetic discharge, occurs primarily in those with an injury above the thoracic T6 level. If left untreated, it can lead to a stroke, seizures, or even death. Autonomic Dysreflexia is a medical emergency.

Common Causes:

- Distended bladder (#1 Cause)
- Constipated bowel
- Pressure Injury/Skin damage
- Fractured bones
- Urinary tract infections
- Ingrown toenails
- Uncontrolled Spasticity
- Any condition or procedures that may cause pain or discomfort but is located below neurologic injury level

Common Signs & Symptoms

Above Level of Injury:

- Increased Blood Pressure (A fast increase in blood pressure, 20-40 mm Hg systolic higher than usual)
- Bradycardia (slow heart rate) or Tachycardia (fast heart rate)
- Pounding headache
- Apprehension/anxiety/ uneasy feeling
- Changes in vision
- Nasal congestion
- Sweating
- Flushed skin
- Goosebumps
- Tingling sensation

Below Level of Injury:

- Nausea
- Chills without fever
- Clammy
- Cool
- Pale

My Information

Name:

_____

Medical Information:

Baseline Blood Pressure:

_____

Level of Injury:

_____

Completeness of Injury:

_____

SCI Doctor:

Shane Stone, MD (UC Davis Health)

Clinic Number:

916-734-7041

My Common Causes of AD:

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What to Do

1. Sit up—Sit up or raise your head 90 degrees. IMPORTANT: Stay sitting or upright until blood pressure is normal.
2. Take off—Take off or loosen anything tight or restrictive.
3. Check blood pressure—Monitor your blood pressure every 5 minutes if greater than 20 mm Hg over your baseline. Be sure to use an appropriate size cuff.
4. Check bladder—Empty your bladder (i.e., catheterize your bladder). If you have an indwelling catheter, check for kinks and blockages.
5. Check bowel—Disimpact bowel after inserting anesthetic jelly or ointment.
6. Check skin—Examine skin for new wounds, pressure ulcers, burns, cuts, insect bites, etc.
7. Find other source—Assess for any other possible source of harmful/painful stimuli or irritant if symptoms have not resolved.
8. Find help—If not able to promptly resolve symptoms on your own, call your healthcare provider for further assistance or go to your nearest emergency room.

IMPORTANT: Tell staff you may have dysreflexia, need your blood pressure checked, need to remain sitting up, and need causes of the problem sought