Autonomic Dysreflexia

This is a summary of the key steps to assess and treat. Full guidance can be found by following the QR code to the National Spinal Injuries Unit for Scotland summary

Stop!
Recognise the signs and symptoms. This is a life threatening condition

Occurs in patients with a spinal cord injury at or above T6.
Common Signs and Symptoms:
Rise in BP, pounding headache, flushing and/or sweating above the level of injury, slowed heart rate, blurred vision or seeing spots, stuffy nose, feeling of doom or anxiety. These can occur in any order and may be mild. Unless this is the 1st time experiencing AD the patient will be familiar with how it affects them- listen to the patient.

Check Blood Pressure (if possible). Is BP ≥20mmHg above the patient's baseline? (Note: BP in a person with tetraplegia or high paraplegia is typically low (e.g. 90-100/60mmHg)

However, recognition and treatment will be symptom led by patients. Treatment should not be delayed to wait for a BP reading or ruled out if a BP reading falls within the normal level for a patient without a spinal cord injury.

Review and treat!
Go through these steps to take appropriate action. Consider them in conjunction and re-review if no resolution, especially if the patient has been transferred to a healthcare setting.

Sit patient up (keep patient sitting or upright until BP returns to normal)
Loosen or remove any tight clothing
Monitor BP (if possible) every 2-5 minutes

Bladder

most likely trigger
If a catheter in situ, check for a full bladder usually due to kinked or blocked catheter. If the bladder is over distended, drain 500ml initially, then 250ml every 10-15 mins to avoid hypotension.

If the bladder is full and there is no catheter in situ, aim to insert a catheter using a lubricant containing lidocaine, into the urethra or SPC tract. Wait 3-5 mins after inserting lubricant to pass or replace the catheter.

If the bladder is not full/catheter draining well then check the bowels.

Bowels

common triggers

If possible check for constipation/full rectum.

Gently insert a gloved finger covered in lidocaine gel into the rectum, if full wait 3-5 mins gently remove faecal mass.

Medication

1st line: Nifedipine 10mg capsule bite and swallow. Can be repeated every 20 minutes, up to 4 capsules in 24 hours.

2nd line: If nifedipine is not available apply 1 GTN spray under the tongue. Dose can be repeated in 5-10 mins (up to 3 doses in 30 mins).

GTN is contraindicated if PDE inhibitor used in the previous 24hr.

Check for other triggers of nocioception:

Exclude intra-abdominal pathology, epididymo-orchitis, pressure injuries, burns, ingrown toenail, fracture.

Ensure adequate analgesia (e.g. morphine) is given when there is a persisting cause of unknown noxious stimulation.

Treat spasm with diazepam, e.g. 5mg PO

Go! To **hospital** if not resolved. Escalate management to experts.

Resolution of symptoms

Blood pressure should be monitored (if possible) for at least 2 hours after an episode to ensure no rebound hypotension and no AD recurrence

Review triggers. Update patient education and plan to prevent repeated episodes. Ensure the patient has an ongoing supply of relevant medications and equipment e.g. catheters and lidocaine gel. If recurrent episodes, discuss

Ongoing AD

If ongoing symptoms, raised BP and/or trigger not identified then admit to hospital (if not already in a healthcare setting). The patent will need further investigation and BP control.

Consider discussion with ITU; the patent may require admission to HDU or ITU setting whilst IV medications are used.