Autonomic Dysreflexia (also known as autonomic hyperreflexia) is one of the most serious life threatening conditions that affect people with spinal cord injury at or above the level of 6th thoracic vertebrae.

The syndrome develops secondary to any noxious stimulus below the level of injury. As the spinal cord is damaged, signals cannot pass normally to the brain, therefore, the body produces exaggerated abnormal nerve signals which cause problems above and below the level of the spinal injury. Below the injury, blood vessels go into spasm causing blood pressure to rise. Above the level of injury, the body senses the high blood pressure and tries to relax the blood vessels (can only influence the blood vessels above the level of injury) which causes flushing and blotchiness of skin and pounding headache.

Symptoms may be mild or severe and patients may present with one or more of the following:
- Pounding headache
- Flushing and/or blotching above the level of cord damage
- Pallor below the level of injury
- Slowed heart rate
- Profuse sweating (above level of injury)
- Palpitations
- Goosebumps
- Blurred vision or seeing spots before the eyes
- Stuffy nose
- Feeling of doom and gloom, anxiety apprehension
- Elevated blood pressure

NB: Under normal circumstances a tetraplegic person may have a low blood pressure (e.g. 90/60). A rise on 20mmHg can be quite significant; therefore if the BP rises to 120/80mmHg it could become an emergency situation. Hypertension may be severe enough to lead to seizures, strokes or ultimately death.

Bladder problems are the most common cause of autonomic dysreflexia.
- Overfull bladder
- Kidney or bladder stones
- High pressure voiding
- Urinary tract infection
- Blocked catheter
- Defective drainage system (e.g. kinked tubing or leg bag too full)
Treatment
Identify the source of the noxious stimulus. Removing the stimulus will cause the symptoms to settle.

Reduce the blood pressure by returning patient to bed and place in a sitting position. (If bladder problems suspected only sit patient to 45 degrees. Sitting at 90 degrees may cause increased pressure on the full bladder).

Check Bladder
If the patient is not catheterised and bladder seems full, catheterise immediately and leave on free drainage. Anaesthetic gel should be inserted into the urethra prior to urethral catheter insertion to offer lubrication and antiseptic action, but not left in situ for 3-5 minutes.

If patient is catheterised, empty leg bag and untwist any kinked tubing. If catheter appears blocked/ not patent, change catheter immediately. Do NOT ATTEMPT to instil a catheter maintenance solution, this will only distend the bladder further with potentially fatal consequences.

If infection is suspected treat with appropriate antibiotic therapy as per COMMUNITY ANTIBIOTIC POLICY FOR SHROPSHIRE & POWYS PRIMARY CARE

Check for other potential causes of autonomic dysreflexia e.g. constipation and treat appropriately.