



Southport and  
Ormskirk Hospital  
NHS Trust

# **PATIENT INFORMATION**

# **Autonomic Dysreflexia**

North West Regional Spinal Injuries  
Centre

If your spinal cord injury is complete and above the level of T6 (chest level) you may suffer from a medical complication known as ***Autonomic Dysreflexia***.

## **WHAT IS AUTONOMIC DYSREFLEXIA?**

Autonomic dysreflexia is characterised by a rapid rise in your blood pressure (B/P) caused by any pain, irritation or over-stimulation to the paralysed parts of your body. This then leads to an over-stimulation of the *Sympathetic Nervous System*. This is one part of your body's internal system (the Autonomic Nervous System), that controls body functions that happen 'automatically', without you having to think about them e.g. pulse, B/P.

Your body's normal response to these stimuli is to 'narrow~ or *constrict* certain blood vessels throughout your body. This means that your heart has to work harder to push the blood through the narrower vessels, therefore your blood pressure begins to rise. Before your injury, when your spinal cord was intact and working normally, your body had its own control system that sent out messages from your brain to adjust and regulate these responses. This caused a 'widening' or *dilation* of the blood vessels and everything would return to normal functioning.

However, since your spinal cord injury these messages are disrupted and this regulation response does not work. This is because in injuries *above the spinal cord level of T6*, the brain loses communication with the nerves below the level of the injury. Unfortunately, the blood vessels carry on constricting until the time when whatever is causing the discomfort is removed. This means that a lot of the blood that should be flowing through blood vessels in the area ***below*** your injury is pushed into the blood vessels *above*

your injury and into the upper part of your body.

This will cause you to have a red and flushed appearance above your level of paralysis (caused by the dilated blood vessels) and a pale appearance below the level of your paralysis (caused by the constricted blood vessels).

It will also cause your B/P to rise and you will start to complain of a 'banging' headache and some other problems (listed below the page).

**THIS IS A MEDICAL EMERGENCY AND CAN BE VERY DANGEROUS IF NOT TREATED IMMEDIATELY. IN SOME EXTREME CASES IT HAS BEEN KNOWN TO CAUSE FITS, BRAIN HAEMORRHAGE OR EVEN DEATH!!**

### **WHAT TO LOOK OUT FOR - THE SIGNS AND SYMPTOMS**

*One or all of these can happen.*

- You may feel restless and short of breath.
- You may complain of a pounding headache.
- You may develop blurred vision.
- Goose pimples will show below your level of paralysis.
- Sweating will be seen above your level of paralysis.
- Blotchy, red skin above your level of paralysis.
- Stiffness of your nose.

- Your blood pressure will increase and your pulse will slow down (these can be checked by your District Nurse or GP).

*Note: many tetraplegic patients normally have a B/P of about 90/60mmHg. A rise of 20mmHg can be quite significant; therefore if yours rises to 120/80mmHg it could become an emergency situation.*

*If you develop one or more of the above symptoms, you should **NEVER** wait for a district nurse or GP to come to your home to check your pulse and B/P because the situation could become much worse by the time they arrive.*

**IF IN DOUBT - PHONE 999 FOR AN AMBULANCE OR  
MAKE YOUR WAY TO THE NEAREST CASUALTY UNIT**

*Autonomic dysreflexia is unfamiliar to many medical and nursing staff outside of Spinal Injury Centres. If you are taken to a hospital where you are not known, it is useful to advise the staff to contact your Spinal Injuries Centre for advice on how to treat this complication.*

### **WHAT ARE THE MAIN CAUSES OF THIS PROBLEM?**

- Most common cause is an over-full bladder, usually caused by a blocked catheter, by drinking too much fluid in between intermittent catheters or by a bladder infection.
- Bladder stones or urine infections can also cause this problem because they can stop you emptying your bladder completely or can cause a cystitis type irritation.

- Constipation is a common cause.
- Ingrown toenails.
- Burns or scalds (including sunburn).
- Fractures of any bone below the level of your paralysis.
- Red marks or pressure sores.
- Sexual intercourse and ejaculation.
- Period pains and labour pains.

***\*Or anything that would normally cause pain, discomfort or an increased stimulation***

## **WHAT SHOULD YOU DO IF THE PROBLEM HAPPENS?**

***Your actions need to be prompt***

- Sit up if possible (or raise your head). This will help lower your B/P.
- Look for and remove the cause of the problem.
- If this problem has happened before, you may have been prescribed drugs to help control your B/P and stop it from rising further.

## **IF YOU THINK YOUR BLADDER IS THE PROBLEM**

- Have you got an indwelling catheter that is blocked, is the catheter tubing kinked or twisted? NEVER DO A BLADDER WASHOUT -This will only cause more

pressure and make the problem worse.

## **CHANGE YOUR CATHETER IMMEDIATELY**

- If you have not got a catheter and you can feel that your bladder is full - **PASS A CATHETER AS SOON AS POSSIBLE** and contact your nearest Spinal Injuries Centre for further advice.

## **IF YOU THINK YOUR BOWELS ARE THE PROBLEM**

- Either check yourself or get someone else to check if your bowel is loaded or impacted.
- If your headache gets worse **STOP CHECKING IMMEDIATELY** and wait for up to 10-15 minutes before trying again.
- If you have some Instillagel (many patients have a tube of this at home if they pass their own catheters) - it can be squirted into the rectum and if you wait for 15 - 20 minutes it will have a '*deadening*' effect and you can then empty your bowel without causing more discomfort and without making the symptoms worse.
- If you notice that you are getting bad headaches even when you are not constipated and you are carrying out your normal bowel regime; you should contact your nearest Spinal Injuries Centre for advice.

## **IF YOU THINK SOMETHING ELSE IS CAUSING THE CONDITION**

- Pressure sores - **DO NOT** apply pressure to the area.

- Burns etc. - Apply cold water or cooling lotions.
- Period pains and ingrown toenails - take painkillers (e.g. paracetamol) and seek advice from your doctor.
- Take any medication that you have been prescribed regularly (especially if it is for your bladder or bowel care).

## **SOME GENERAL INFORMATION ABOUT AUTONOMIC DYSREFLEXIA**

Autonomic dysreflexia or 'dysreflexia' as it is often known as can happen at any time after your injury. You may have no problems for many years, and then one day something may trigger an attack. You may, on the other hand, never suffer an attack at all!!

It is essential that you are aware of this condition because it can be very frightening for both you and your family / carers if you don't know what is happening or what to do.

This is something that only happens to patients who have had a spinal cord injury, therefore, even your GP or District nurse may be unfamiliar about what to do.

*You are responsible for your own body and therefore you should be able to tell people what to do in the case of this problem so that it is treated correctly before it becomes a*

### ***'LIFE THREATENING MEDICAL EMERGENCY'.***

It is essential that you let your consultant at the Spinal Injuries Centre know if you suffer an attack. They may want to carry out some investigations and changes in treatment

so that future episodes do not happen.

The Spinal Injuries Centre at Southport has produced a small card that can be carried in your wallet/purse that will tell others what to do and who to contact in an emergency.

### **SOME INFORMATION FOR YOUR GP / LOCAL HOSPITAL**

Southport Spinal Injuries Centre advises that Nifedipine (Adalat) 5-10mg capsules be prescribed for these attacks.

The capsule is pierced in order for the liquid to be dispensed into the mouth.

The capsule should then be chewed and swallowed.

This helps to control the B/P. The capsule should be taken to control BP only during the dysreflexia episode.

If these symptoms start to occur regularly, it is essential that further advice be sought from the medical staff at the Spinal Injuries Centre.

If you have taken Nifedipine please be aware that you need to lie down for 1 hour once the dysreflexia episode is over as your BP may now be lower than normal and will need time to adjust to normal limits.

Important contact numbers are:

<b>Switchboard</b>	<b>(01704) 547471</b>
<b>Nurse in Charge Ward Office</b>	<b>(01704) 704346</b>
<b>Spinal OPD</b>	<b>(01704) 704575</b>



If you would like to discuss any issues raised within this leaflet please contact a member of the nursing staff:

**Ward Office  
(01704) 704346**

**Spinal Outpatient Department  
(01704) 704575**

**Spinal Appointments  
(01704) 704333**

**Other sources of information are:**

[www.spinalnet.co.uk](http://www.spinalnet.co.uk)

**References:**

Zejdlik, C.P. (1992) Management of Spinal Cord Injury, 2<sup>nd</sup> Edition Jones & Bartlett, Boston, M.A.Press.

**During your contact with us, it is important that you are happy with your care and treatment. Please speak to a member of staff and/or the ward/department Sister/Charge Nurse if you have any questions or concerns.**

## **MATRON**

A Matron is also available during the hours of 9.00 to 5.00 pm Monday to Friday. During these periods, ward/department staff can contact Matron to arrange to meet with you. Out of hours, a Senior Nurse can be contacted via the ward/department to deal with any concerns you may have.

## **INFECTION CONTROL REQUEST**

Preventing infections is a crucial part of our patients' care. To ensure that our standards remain high our staff have regular infection prevention and control training and their practice is monitored in the workplace. We ask patients and visitors to assist us in preventing infections by cleaning their hands at regular intervals and informing staff of areas within the hospital that appear soiled.

As a patient there may be times that you are unsure whether a staff member has cleaned their hands; if in doubt please ask the staff member and they will be only too happy to put your mind at ease by cleaning their hands so that you can see them.

## **SPECIAL INSTRUCTIONS**

### **ANY CONDITION SPECIFIC DANGER SIGNALS TO LOOK OUT FOR:**

- Blocked catheter
- Loaded bowel
- Pounding headache
- Blurred vision

### **CONTACT INFORMATION IF YOU ARE WORRIED ABOUT YOUR CONDITION**

Your own GP –

Spinal Injuries unit – (01704) 704345 Nurse Station

### **OTHER USEFUL TELEPHONE NUMBERS/CONTACTS:**

NHS 111

Stop Smoking Helpline (Sefton) - 0300 100 1000

Stop Smoking Helpline (West Lancashire) - 0800 328 6297

**Please call 01704 704714 if you need  
this leaflet in an alternative format**

**Southport and Ormskirk Hospital NHS Trust**

Ormskirk & District General Hospital  
Wigan Road, Ormskirk, L39 2AZ  
Tel: (01695) 577111

Southport & Formby District General Hospital  
Town Lane, Kew, Southport, PR8 6PN  
Tel: (01704) 547471

**FOR APPOINTMENTS**

Telephone (01695) 656680  
Email [soh-tr.appointments@nhs.net](mailto:soh-tr.appointments@nhs.net)

Please remember to complete the **attached** *Friends and  
Family Test*.

Alternatively, you can complete the *Friends and Family Test*  
on-line by going to: [southportandormskirk.nhs.uk/FFT](http://southportandormskirk.nhs.uk/FFT)

**Thank you**

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