

## MEDICAL EMERGENCY CARD

### for AUTONOMIC DYSREFLEXIA (sudden hypertensive crisis)



In individuals with spinal cord injury  
At or above T6 neurological level



Personal information

Name: \_\_\_\_\_

Age: \_\_\_\_\_ Date of SCI: \_\_\_\_\_

Neurological level of injury (NLI): \_\_\_\_\_ AIS: \_\_\_\_\_

Complete lesion  Incomplete lesion

Range of Baseline resting SBP: \_\_\_\_\_ mmHg

Range of resting heart rate: \_\_\_\_\_ /min

Allergies: \_\_\_\_\_

Rehabilitation Department or SCI Unit: \_\_\_\_\_

Tel: \_\_\_\_\_ Tel. of relative: \_\_\_\_\_

Date of filling out the AD card: \_\_\_\_\_



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English version

### WHAT IS IT? AUTONOMIC DYSREFLEXIA (AD)

AD is an unopposed overactivity of sympathetic nervous system, in individuals with tetraplegia or high paraplegia (at or above T6 NLI). The predominant sign of AD is a sudden increase in SBP >20 mmHg above the baseline in adults. An AD episode occurs in response to noxious or non-noxious stimuli below the NLI.

**!** If AD is not treated in time may lead to extremely increased blood pressure (BP >240/130 mmHg) and to arrhythmias, myocardial ischemia, stroke, intracranial hemorrhage, seizures or even death.

### ATTENTION !

The "normal" baseline BP of persons with high level SCI is usually around 90/60 mmHg in supine position and even lower in sitting position.

### COMMON SIGNS & SYMPTOMS OF AD

- The major sign of AD is an increase in systolic blood pressure >20 mmHg above baseline in adults, which may or may not (\*) be associated with symptoms.
- flushing skin & sweating above the NLI.
- pale skin below the NLI (sweating sometimes).
- nasal congestion.
- breathing difficulty.
- blurring of vision.
- nausea.
- feeling of great anxiety.
- pounding headache.
- dysrhythmia with bradycardia or tachycardia.
- piloerection.

(\*) "Silent" AD: Many people with SCI cannot detect when it is not associated with other symptoms, which can have fatal consequences.

### COMMON CAUSES

- urinary tract: retention (most common), blocked catheter, urinary tract infection, poor control / unbalanced neurogenic lower urinary tract dysfunction (NLUTD).
- skin lesions: pressure injury, burn, ingrown toenail, etc.
- fecal impaction.
- sexual activities.
- fractures of lower limbs.
- iatrogenic causes. (catheterization, urodynamics, cystoscopy, colposcopy, gynecologic exam etc.).
- any noxious or not noxious stimulus below the NLI.

### Previous AD episodes

YES  NO

Usual cause: \_\_\_\_\_

Usual Symptoms: \_\_\_\_\_

Usual treatment: \_\_\_\_\_

### Previous history of hypertension

YES  NO

Medication for hypertension: \_\_\_\_\_

### Useful links



2021, ISAFSCI  
2nd edition.



Paralyzed Veterans of America (PVA): Evaluation and Management of Autonomic Dysreflexia And Other Autonomic Dysfunctions, 2020.



2009, Krassioukov, A., et al.  
A systematic review of the management of autonomic dysreflexia after spinal cord injury.



NSW Government,  
Treatment algorithm for AD in people with SCI.

### WHAT TO DO ?

### ACUTE MANAGEMENT PROTOCOL

- 1 Sit the patient upright (90 degrees) (if possible) with legs down.
- 2 Remove whatever is tight below the level of the lesion (straps, clothing, etc.).
- 3 Monitor blood pressure (BP) every 3-5 min.
- 4 Identify the stimulus that caused AD.
- 5 Quick exam to include abdomen for distended bladder or bowel, lower limbs for skin lesion, fractures, etc.
- 6 If indwelling urethral catheter is in place, check for obstructions.
- 7 If an indwelling catheter is not in place, catheterize the patient using anesthetic jelly.

### ATTENTION !

- If there is a need to check bowel, this must be done using anesthetic jelly and wait 3 min to take effect.
- Do not follow Hypertensive crisis protocol for able bodied.
- If no obvious cause is found or management of the cause is delayed and SBP continues to stay high (>150 mmHg) after at least two measurements, give an antihypertensive medication available to you with rapid onset and short duration (most commonly used internationally: sublingual nifedipine every 5-10min, up to 3 doses in 30min or \_\_\_\_\_ most commonly used nationally medication), may repeat in 20-30 min, and continue to investigate causes of AD.
- Not to use glyceryl trinitrate if sildenafil (Viagra), vardenafil (Levitra) has been taken in the previous 24 hours or tadalafil (Cialis) in the previous 4 days.
- If IV antihypertensives are needed, this should be done only in a monitoring setting of ICU.
- Patient with repeated episodes of AD should be referred to SCI specialized unit.