CMG 18a – AUTONOMIC DYSREFLEXIA

(Revised: July 2018)

Autonomic dysreflexia results from widespread reflex activity of the sympathetic nervous system below the level of spinal cord injury (SCI) triggered by an ascending sensory (usually noxious) stimulus. This activity remains uncontrolled due to isolation of the spinal cord below the injury from the regulatory centre in the brainstem. Parasympathetic activity above the level of SCI occurs in response.

Common causes of autonomic dysreflexia include:

BLADDER: distended or hyperactive bladder, urinary tract infection, bladder/kidney stones, urological procedure (e.g. catheter insertion), blockage of urinary catheter

BOWEL: constipation, faecal impaction, rectal irritation (e.g. enema or manual evacuation), haemorrhoids

SKIN: ingrown toenail, burn, pressure area, tight clothing

OTHER: any irritating stimulus, including fracture, distended stomach, sexual intercourse, labour or severe menstrual cramping

Autonomic dysreflexia affects individuals with spinal cord injury typically at or above T6 level.

The sudden onset of any of the following is significant:

- sudden hypertension (this may fall within the normal limits for the rest of the population)
- pounding headache
- bradycardia
- flushing/blotching of skin and profuse sweating above spinal injury level
- skin pallor and piloerection below the spinal injury level
- chills without fever
- nasal congestion
- blurred vision
- shortness of breath, sense of apprehension and / or anxiety
- irritability or combative behaviour (in people with limited cognitive and communication skills)

continued over

INITIAL ACTIONS
Ask the patient and carer if they suspect a cause
Elevate patient's head and position with legs dependent, if possible
Loosen any constrictive clothing
Check bladder drainage equipment for kinks or obstruction. **If found**: drain 500ml initially, then a further 250ml every 15 minutes until bladder is empty
Monitor BP every 2 – 5 minutes
Avoid pressing over the bladder

TREATMENT		
If, despite initial actions, BP remains elevated (≥150mmHg systolic, or ≥20mmHg above known resting level), commence treatment:		
ICP	**Glyceryl trinitrate**: ADULT: 400mcg spray **OR** 300mcg (½ tablet) – sublingually PAED (12 – 16yrs): half adult dose (150mcg or ¼ tablet) – sublingually (do not use spray)	**AP**
ICP	If little or no effect, repeat GTN up to twice (total 3 doses) with 5 minutes between doses, and monitoring BP	**AP**
ICP	Analgesia with caution as required (especially if noxious stimuli are the suspected cause, noting that the patient may not be able to feel or report this)	**AP**
ICP	Sedation with caution as required	