Autonomic Hyperreflexia (AHR/Autonomic dysreflexia)

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DISEASE OVERVIEW
• AHR is a clinical emergency that commonly affects spinal cord injury patients with injury at or above T6 once spinal shock has resolved.
• Pathophysiology of AHR: Sensory input sent from bowel/bladder/skin travels up to the brain but gets stopped at spinal lesions and triggers a sympathetic response. This causes vasoconstriction resulting in hypertension, headache, diaphoresis. A compensatory parasympathetic response to this results in a decreased heart rate.

NEURO EXAM PEARLS
The following assessment findings should prompt consideration and investigation for AHR:
• Hypertension - SBP 20 mmHg increase or higher
• Bradycardia*/Tachycardia
• Headache
• Flushing
• Blurred vision
• Goosebumps/ chills
• Diaphoresis
• Below lesion: pale
*Bradycardia is most common although tachycardia can occur

MANAGEMENT STRATEGIES/ NURSING IMPLICATIONS
Exam risks related to disease, history and nursing concerns
• Quadriplegic patients commonly have low blood pressure, hypertension might not be recognized until compared to a baseline.
• Precipitating factors: Bladder (most common), bowel, skin. When examining patient check catheter for kinks, assess for last void/BM, check skin for pressure/ clothes bunching.
• Check bladder Q4H with bladder scan, straight cath if necessary.
• Check bowel for impaction every shift
• Should have daily bowel and bladder regimen (bowel protocol – daily suppository with digital stim, bladder care: foley catheter, intermittent straight cath)
• Skin assessment q shift and with repositioning. Check for kinking in tubes, wrinkles in sheets etc.
• Continuously monitor blood pressure. Quadriplegic patients commonly have low blood pressure; hypertension might not be recognized until compared to baseline.
• Dermatome review
• Complications: seizure, coma, retinal hemorrhage, stroke, MI, death.
• Can be asymptomatic to life threatening

Priority Nursing Measures if AHR is Suspected
• Sit upright to cause orthostatic hypotension
• Loosen clothing, binders, splints, compression socks
• Empty bladder
• Evacuate stool from rectum