

Autonomic dysreflexia from bladder calculi

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Background

- 29 year-old patient with C6 ASIA A spinal cord injury
- History of autonomic dysreflexia (AD) which resolves with catheterization
- Recently treated for dental infection with amoxicillin/clavulanic acid which caused vomiting and resultant poor oral intake
- Developed headache, malaise, and increased spasticity four days later and presented to outpatient clinic

Case Summary

Patient was admitted for evaluation of AD. In the emergency department he had a urinary tract infection on urinalysis and numerous new bladder calculi on CT abdomen/pelvis. Despite bladder decompression, antispasmodics, pain medications, nitro paste and care for stable stage 3 pressure injuries his vital signs remained unstable (bradycardia low 30s and SBP>200). Work up including physical exam, MRI spine, and vascular ultrasound were negative for acute pathology. He completed 10 days of antibiotics without improvement. The multiple bladder calculi were believed to be the cause of his AD. Urology performed a cystoscopy with laser assisted cystolitholapaxy. Following the procedure AD resolved.

“Bladder calculi should be considered as a source of autonomic dysreflexia”



Figure 1: Bladder calculi seen on abdominal x-ray imaging



Figure 2: Bladder calculi seen on CT abdomen/pelvis in ED

Discussion

- Though typically thought of as a benign finding, bladder calculi can cause AD
- If present, this should be considered as a source of AD, especially in cases of gradual progression
- Urological intervention may be required in the inpatient setting if not medically stable
- Considerations for pain control should be discussed preoperatively with Anesthesiology to prevent exacerbations from intervention

References

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