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The Rollercoaster Effect: A case of Dramatic Blood Pressure Swings following Automatic Dysreflexia. A Split-Second Dilemma between Inotropes Vs Anti-Hypertensive agents

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INTRODUCTION

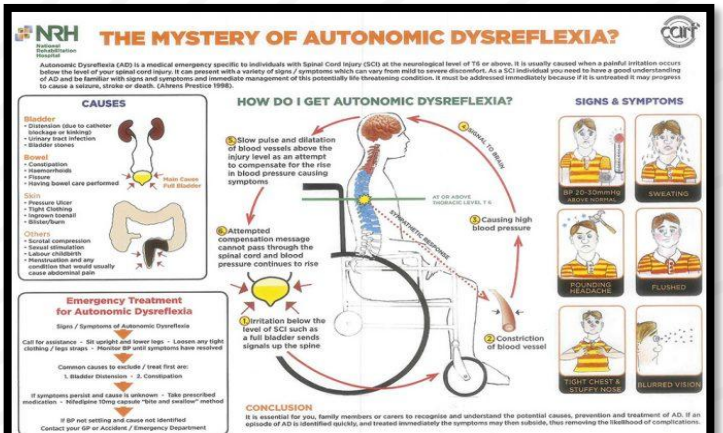
Autonomic dysreflexia (AD) is a life-threatening condition seen in 80% of patients with spinal cord injury (SCI) at T6 and above. This case highlights the dramatic "rollercoaster effect" of blood pressure instability in AD, emphasizing the urgency of trigger identification, timely intervention and the delicate balance needed to avoid overcorrection.

CASE DESCRIPTION

A 43-year-old man with a history of chronic T1 spinal cord injury was brought to Emergency Department with shortness of breath, pounding headaches and constipation for 3days. Home BP monitoring revealed elevated blood pressure readings. On examination, patient was found to be fully alert but flushed. Vitals revealed recurrent episodes of labile BP readings from hypotension to hypertension, bradycardia, and hypothermia with other systemic examinations were unremarkable. Rapid-Ultrasound-for Shock-and Hypotension (RUSH) Exam Ultrasound Protocol and all blood parameter were normal. However, after given Ravin enema to remove faecal impaction, the rollercoaster effect of blood pressure was subsided. After discussion among the Emergency Physician and Medical team, patient was not initiated any inotropes or antihypertensives and admitted under medical ward for close monitoring and discharged well.

DISCUSSION

AD is caused by an overactive sympathetic response without parasympathetic balance, leading to vasoconstriction and abrupt elevation of blood pressure followed by reflex bradycardia due to baroreceptor mediated reflex. Common precipitating factors for AD includes urinary retention and faecal impaction. Recognizing and eliminating triggers is key to effective management. Additionally, patients with recurrent AD should be educated on self-management strategies, including regular bladder and bowel emptying as AD carries the risk of haemorrhagic stroke, seizure and death. Providing them with an alert card can help ensuring healthcare providers to be vigilant on AD allowing for a more rapid and effective respond.



KEYWORD AUTONOMIC, DYSREFLEXIA, EMERGENCY

CONCLUSION

AD is frequently missed by untrained medical staff, highlighting the need for thorough evaluation for proper diagnosis and management.

REFERENCES:
1. Yılmaz O, Göçmen G, Coşkun R, Saygı K. Recurrent autonomic dysreflexia: a case report and review of the literature. *Cyprus J Med Sci.* 2022;7(1):152–154.
2. Alwashmi AH, Alsheikh M, Alharbi H, Alqahtani S. Spinal cord injury and autonomic dysreflexia: a case report on an overlooked complication. *Cureus.* 2022;14(10):e30259.