Is It Really Ever A Pheo? Understanding Paroxysmal Hypertension

AtlantiCare

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Introduction

Pheochromocytoma is considered when confronted with sudden, unexplained hypertension (HTN). We present a case of a man with all the features of pheochromocytoma, but none of the associated lab results.

Case

43-year-old male with major depressive disorder, post-traumatic stress disorder, and insulin-dependent type 2 diabetes mellitus

Presentation:

- Admitted medically following repeated episodes of dizziness, chest tightness, and confusion
- Concurrent severe hypertension with systolic pressures reaching 210 mmHg
- Symptoms resolved following administration of labetalol

Differential diagnosis: seizure, migraine, labile hypertension, pheochromocytoma, functional neurological disorder, or panic disorder

Laboratory evaluation: unremarkable, including urine metanephrines

Other findings: normal telemetry and echocardiogram, CT abdomen/pelvis without evidence of adrenal mass, CT/MRI brain scans only remarkable for a stable 4 mm subcortical hyperintensity in the right frontal lobe

Dx and Management: Patient was diagnosed with Pseudopheochromocytoma. Psychiatric medication was optimized and the patient was referred for psychotherapy.

Paroxysmal Hypertension Differential

Pheochromocytoma

- Plasma metanepherines
- Only 1-2% patients with paroxysmal HTN have pheochromocytoma

Labile Hypertension

 Elevated blood pressure during times of stress

Panic Disorder

- Predominant panic
- · Lesser degree of blood pressure elevation

Baroreceptor Failure

 Unprovoked hypertensive <u>and</u> hypotensive episodes

Pseudopheochromocytoma...

References

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2. Pickering TG, Clemow L. Paroxysmal hypertension: the role of stress and psychological factors. J Clin Hypertens (Greenwich). 2008 Jul;10(7):575-81. doi: 10.1111/j.1751-7176.2008.07844.x. PMID: 18607143; PMCID: PMC8110075.

 Mann SJ. Severe Paroxysmal Hypertension (Pseudopheochromocytoma): Understanding the Cause and Treatment. Arch Intern Med. 1999;159(7):670–674. doi:10.1001/archinte.159.7.670

Discussion

Pseudopheochromocytoma Characteristics

Defining Features:

 Recurrent, sudden, unprovoked episodes of elevated blood pressure
BP often >200/110

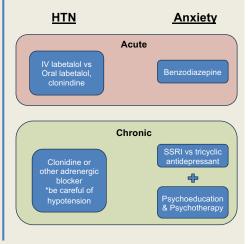
Associated Symptoms:

- Headache
- Palpitations
- Diaphoresis
- Flushing

Laboratory Features:

 Negative urine or plasma metanepherines

Management



Conclusion

- Pseudopheochromocytoma should be highly considered in the event of sudden episodes of elevated blood pressure without an identifiable cause
- Similar to other psychosomatic disorders, it is vital to discuss diagnosis, provide validation, and discuss contributory psychological factors