Barriers to Care in Resistant Hypertension

Alice Solademi-Dunkle, DO PGY-3; Sarah Turner, DO

Background

Resistant hypertension is blood pressure that remains above target range with use of three antihypertensive agents. Loss of insurance, financial hardship, access to care are some barriers to care that can make the workup and treatment of resistant hypertension more difficult. Identifying barriers to care for these patients are key in management of the disease state and comorbidities

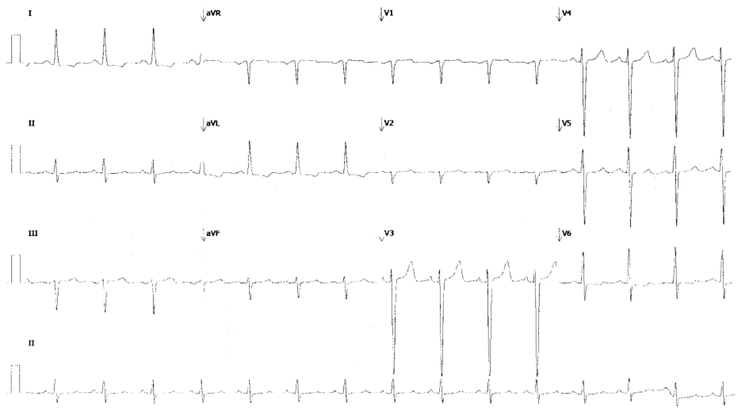
Case

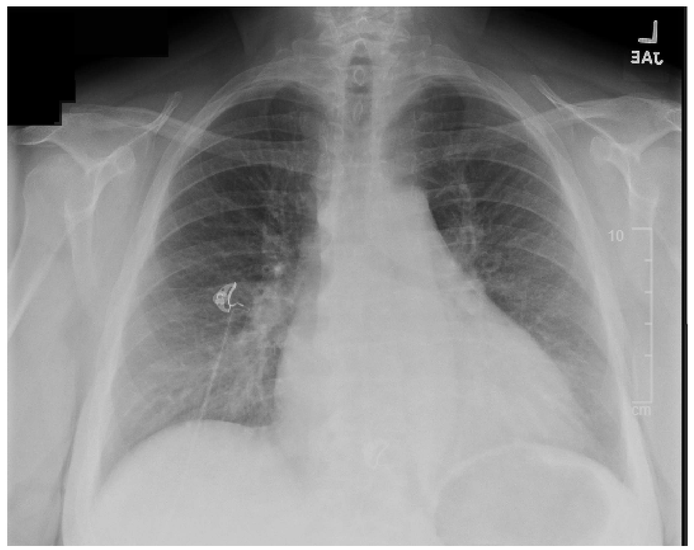
58 year-old female with PMH significant for resistant hypertension and DMII, and endometrial cancer (s/p radical hysterectomy) was sent to the ED for chest pain. Pt had been having intermittent chest pain for the past 4 days with associated shortness of breath and palpitations. She was recently seen in office and EKG showed LVH. She recently had labs ordered in office that showed renin activity-1.713 with elevated aldosterone of 72.3 (0.0-30.0). UA-300mg protein. Urine protein electrophoresis-1523mg/24hrs. Stress echo was and renal ultrasound ordered, but not completed as of yet. Prior authorization for stress echo was denied. Pt notified clinic she had been having chest pain and was, therefore, sent to the emergency department for evaluation.

Results

- ED vitals: T-97.9, BP-189/129, HR-98, RR-20, O2-94% on room air.
- Labs showed hgb-16.3, hct-49.6, K-3.1
- EKG read from ED: LVH, suggestive of left atrial dilatation
- Echocardiogram:
    - **EF of 15-20%**
    - **severely dilated cardiomyopathy**
    - grade I diastolic dysfunction
- Renal ultrasound:
    - mild cortical atrophy of bilateral kidneys
    - Right renal cyst

Results continued





Discussion

Patient had been lost to follow up. She originally was receiving care at a Community Health Center (Federally Qualified Health Center) which had limited access to specialists and had to rely on a charity care system, as well as patient's willingness to see, yet another doctor. She ceased care at the Community Health Center (FQHC) due to medical differences of opinion between a provider she saw and her own beliefs. She had been on several alternative treatments with a provider out of the area and went months without care, which included cessation of her antihypertensive medications.

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Discussion continued

- After establishing care in the family medicine clinic, she was successfully diuresed with Lasix in the outpatient setting while exhibiting exacerbation of her CHF (likely acute on chronic). She discontinued Lasix on her own due to issues with tolerating the medication. This resulted in a recurrence of volume overload, recurrence of shortness of breath, and new onset chest pain in which she was sent to the emergency department for evaluation. Though her echocardiogram was appropriately ordered as an outpatient, cost coverage was denied by her insurance. Obtaining the echocardiogram in the emergency department showed the severity of her CHF with reduced ejection fraction.
- Due to limited finances and no health care coverage, patients may withhold important information, so as not to prompt various evaluations that can be costly. This is presumed to be the case given how stable she appeared when she established care in the family medicine residency clinic—she was likely experiencing significant shortness of breath amongst other symptoms. Cost of care was discussed given the fact she did not have health insurance and expensive/more costly tests and medicine were delayed until she obtained insurance through government programs.

Conclusion

- Long standing resistant hypertension with intermittent treatment is presumed to be the cause of her cardiomyopathy. Financial barriers and spiritual aspects also contributed to her intermittent treatment- patient was a practicing Jehovah's Witness. Her religious beliefs could explain why she chose to use alternative therapies as compared to more Westernized treatments.
- Ordering outpatient diagnostic testing can be taken for granted in those with good health insurance coverage or those willing to pay the extra cost of having a test. Fear of excessive medical cost serves as a major deterrent and creates a great delay in offering/ordering testing and medications which can result in poor patient care and poor health outcomes.

References

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