Dealing with Hypertensive Urgencies
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INTRODUCTION

Patients presenting with severe hypertension can often be alarming for house officers and family members. Systolic blood pressures > 180 mm Hg, with or without a diastolic blood pressure >120, have been known to progress to hypertensive emergencies. The majority of complications are related to end organ damage; this may include encephalopathy, blurred vision, chest pain, unstable angina, acute myocardial infarction and acute renal insufficiency, with or without proteinuria. In the absence of these acute signs, the control of hypertensive urgency remains paramount but is not considered an emergency.

The etiology of severe, asymptomatic hypertension is extremely important in defining treatment strategies. The majority of these patients have a prolonged history of uncontrolled hypertension secondary to poor compliance or inadequate treatment regimens. Guidelines are not entirely specific in the management of hypertensive urgency.

TREATMENT STRATEGY

Based on the current literature, the following approach is recommended:

1. **Confirm that the blood pressure is elevated.** The reading should be repeated in both upper extremities; the physician should ensure that the appropriate cuff size is used and that the readings are consistent.

2. **Goal for blood pressure reduction:** the ideal goal is to reduce the systolic blood pressure by 20-25% and this should be done over a period of hours to days. A rapid decrease of blood pressure should be avoided and may precipitate cerebral or myocardial ischemia [1].

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3. Choosing the correct medication:

   A. Etiology of the current hypertensive urgency:

      i. Non-compliance: restart the patient’s usual home antihypertensives at the prescribed dosages; if more than three medications, introduce them two at a time.

      ii. Emotional stress induced: allow the patient to rest in a comfortable, darkened room. All patients with hypertensive urgency should be placed in a comfortable environment

      iii. Dietary indiscretion: excess salt intake may lead to hypertensive urgency and treatment with a diuretic may prove beneficial [3].

      iv. Uncontrolled pain: treatment of the underlying pain will likely correct the hypertension

   B. Previously untreated Hypertension:

      i. Start treatment with a low dose ace inhibitor, beta blocker or calcium channel blocker. Diuretics alone may not be effective [2].

      ii. If a two drug regimen is used, it is best to start at lower doses and to use a diuretic as one of the agents.

4. Follow-up: Patients should be followed closely for signs of end organ damage. Blood pressure control should aim for a steady decline of 20-30 mm Hg over a period of at least several hours. Patients may be discharged once control is sustained below 160/100.

CONCLUSION

Severe asymptomatic hypertension presents a challenging clinical situation. While it requires immediate attention, it does not require rapid reduction of the blood pressure, which may lead to adverse outcomes. Treatment strategies should be tailored to the individual patient and the choice of medications must consider the presence or absence of co-morbid conditions.

REFERENCES


