

A 50 year old man with fever and headache.....

Presenting complaints

A 50 year old male patient comes to the clinic with complaints of cough, cold, fever and body ache since 2 days. He also complained of headache which is usually present early in the morning and eye pain since the last 2 months. The cough was productive and interfering with his daily routine activity. He said the fever was high grade and used to come down with the use of antipyretics. But his headache did not respond to analgesics. There was no history of blurring of vision. There were no other complaints.

Past and family history

He was a laborer by profession and worked in a construction company since the last 30 years. There was a history of diabetes since the last 5 years and was stabilized on metformin 500mg twice daily. He was a chronic smoker and an occasional alcoholic. Family history was not significant.

Physical examination

On examination following observations were made;

- ∇ Patient was conscious and co-operative.
- ∇ There was no cyanosis and pallor. There was evidence of nasal congestion with normal tonsils and adenoids.
- ∇ Temperature: 102⁰F, pulse rate: 100/min regular and respiratory rate: 16/min
- ∇ Blood pressure: 148/92 mmHg in sitting posture
- ∇ Random blood sugar: 130mg%
- ∇ Lipid profile: normal
- ∇ Systemic examination was unremarkable

Management

The patient was diagnosed as a case of fever due to viral infection and was prescribed tablet paracetamol 500mg to be taken when fever was present, tablet cetirizine 5mg to be taken twice daily and a cough expectorant. He was also advised to take steam inhalation. As bacterial infection was not suspected no antibiotics were prescribed. He was asked to come to the clinic again the next day.

On follow-up he was symptomatically much better, cough and body ache had reduced and there was low grade fever. His repeat blood pressure in sitting position was 146/90 mmHg. He was advised to consume a low salt diet and again follow-up after 3 days. His viral infection had totally subsided and all his medications were stopped. His repeat blood pressure

was 148/90 mmHg. He was again called for a check of his blood pressure and it was found that the pressure was high. All this time his complaint of headache had continued. He was labeled as a case of hypertension and started on hydrochlorothiazide (12.5mg) a thiazide diuretic once daily. He was educated about his condition and advised to strictly follow dietary changes. On follow-up after 4 weeks there was a significant reduction in blood pressure (132/80 mmHg). His headache and eye pain had reduced. He was advised to continue the same medications and check his blood pressure regularly.

Discussion

The treatment of hypertension on an outpatient basis should be approached in a systematic manner. Most cases of hypertension are diagnosed accidentally as seen in this case. The diagnosis of hypertension should always be verified first before treatment is initiated and, where indicated, a workup should be done. Lifestyle modifications should be considered in all patients with hypertension. Blood pressure can be brought to goal in the majority of patients if antihypertensive medications are correctly dosed or combined. As blood pressure is brought to goal in the patient with hypertension, ongoing attention should be directed to long-term adherence to therapy.

The Seventh Report of the Joint National Committee on prevention, detection, evaluation, and treatment of high blood pressure recommends use of thiazide diuretics as first line therapy in patients with Stage 1 hypertension. This patient was done the same and the desired goal of blood pressure was reached.

Staging of office blood pressure		
Blood Pressure Stage	Systolic Blood Pressure (mmHg)	Diastolic Blood Pressure (mmHg)
Normal	<120	<80
Pre-hypertension	120–139	80–89
Stage 1 hypertension	140–159	90–99
Stage 2 hypertension	≥160	≥100

Clinical message

- It is important to check blood pressure properly in all patient above 40 years as most are asymptomatic.
- At least 3 blood pressure readings should be taken at different times before labeling the patient as hypertension.
- Educate the patient about the condition and emphasize on taking medications regularly and also checking blood pressure at intervals.