

Unit 3- Hypertension

L- Chapter 36

ONLINE CONTENT (1H)

Unit Objectives:

- Describe the collaborative care of primary hypertension, including drug therapy and lifestyle modifications. (1,2)*
- Use the nursing process as a framework for providing individualized care to patients with hypertension. (1,2,5,7)*
- Describe the collaborative care of a patient with hypertensive crisis. (1,2)*
(*Course Objectives)

Use your three handouts: Highlights from the 2017 Guideline for the Prevention, Detection, evaluation, Management of High Blood Pressure in Adults; and How Can I Reduce High Blood Pressure?, and Guidelines Made Simple, to answer the following questions. Place your answers in the Unit 3 Chapter 36 Dropbox by 0800 on 2/8/2024.

1) What are the parameters for the categories of blood pressure?

Normal: Systolic BP: less than 120 mmHg and Diastolic BP less than 80 mmHg

Elevated: Systolic BP: 120-129 mmHg and Diastolic BP: less than 80 mmHg

Stage 1: Systolic BP: 130-139 mmHg or Diastolic BP 80-89 mmHg

Stage 2: Systolic BP: Greater than 140 mmHg or Diastolic BP greater than 90 mmHg

2) Name ten things to do or avoid to obtain an accurate blood pressure measurement.

1.) Make sure that the instrument one is using is properly calibrated.

2.) Have the patient avoid smoking, caffeine, or exercise within 30 minutes before measurements.

3.) Make sure they empty his or her bladder and sit quietly for at least 5 minutes before measurements and remain still during measurements.

4.) Make sure to support the limb used to measure BP, ensuring that the BP cuff is at heart level and using the correct cuff size

5.) Do not take the measurements over the clothes.

6.) Measure in both arms and use the higher reading, an average of 2 to 3 measurements taken on 2 to 3 separate occasions will minimize errors.

7.) Use the same validated instrument at the same time when measuring at home to more accurately compare results.

8.) Take at least 2 readings 1 minute apart each morning before medication and each evening before supper.

9.) Sit upright with your back against a chair, feet flat on the floor, and your arm supported at heart level on a table.

10.) Ensure that the cuff fits snugly around your upper arm, not too tight or not too loose.

3) What is the main difference between hypertensive urgency and a hypertensive emergency?

Hypertensive urgencies would be connected with severe Blood pressure elevation in otherwise what we know as stable patients without acute or impending change in target organ damage or dysfunction rather than hypertensive emergency where that is associated with severe elevated blood pressures with evidence of new or worsening target organ damage.

4) What steps should we encourage patients to take when measuring their blood pressure at home?

-position themselves correctly with the bottom of the cuff directly above the bend of the elbow

-ideally obtain weekly readings 2 weeks after a treatment change and the week before a clinic visit

-Record all readings accurately; use a monitor with built-in memory and bring it to all clinic appointments.

-For clinical decision-making base the patient's blood pressure on an average from readings on 2 or more occasions.

5) What should we recommend regarding physical activity for patients with hypertension?

-Regarding physical activity we should recommend

*Aerobic activity for 120-150 min/week (it helps 65-75% of the heart rate reserve) so impact on hypertension would be -5/8 mmHg

*Dynamic resistance 90-150 minutes a week (it helps 50%-80% 1 rep maximum) and 6 exercises, with 3 sets/exercise and 10 repetition/set. The impact on hypertension would be -4 mmHg

*Isometric resistance

~want to do this 4 x 2 minutes (hand grips), 1 minute rest between exercises (30%-40%) maximum voluntary contraction, 3 sessions a week for 10-8 weeks. This affects hypertension by -5 mmHg.

6) What are seven steps patients can take to reduce high blood pressure?

1.) Reach and Maintain a healthy weight.

2.) Eat a heart healthy diet that is rich in vegetables, fruits, and whole grains and includes low-fat dairy products, poultry, fish, legumes, non-tropical vegetable oils and nuts. One wants to limit intake of sodium, sweets, sugar sweetened beverages and red meats. Choose foods rich in potassium.

3.) Be more physically active

4.) Don't smoke and avoid second-hand smoke

5.) Limit alcohol to no more than one drink per day for women or two drinks a day for men.

6.) Take medicine the way your doctor tells you.

7.) Know what your blood pressure should be and work to keep it at that level.