Pharmacology

Health & Medicine, Nursing

Pharmacology Total Number of Words: 573 Influences of Age, Gender, and Ethni on Hypertensive Medication Socio-demographic factors such as age, gender, and ethnic background can significantly influence the kind of treatment used in the management of hypertension. Often times, it is the older patients who has more knowledge and loyal to the use of anti-hypertensive regimens as compared to the younger individuals (Alsolami, Hou and Correa-Velez, 2012). In the study of Braverman and Dedier (2009), the authors found out that male African Americans with low educational background who belong to low socio-economic status were more devoted in the use of antihypertensive treatment as comapred to female African Americans who belong to the same socio-economic class with the same level of educational background.

Applicable to patients who were diagnosed with hypertension, OConnell (2014: 12) pointed out the idea that “ calcium channel blockers” should be given to those with African origin. Since the patient is an African man, the administration of “ calcium channel blockers” is much better as compared to Maxzide 37. 5/25 mg each morning. As such, the best option to improve CF’s blood pressure is to change the patient’s current medication to calcium channel blockers and ACE inhibitors (i. e. Lotrel – amlodipine and benzepril, Teczem – diltiazem and enalapril, or Lexxel – felodipine and enalapril) (Makani et al., 2011).

Calcium channel blockers can effectively reduce the patient’s blood pressure by purposely dilating the arteries (Elliott & Ram, 2011). The main reason behind the need to combine the use of calcium channel blockers with ACE inhibitor is not only to increase its effectiveness in treating hypertension but

also to prevent the risks of developing peripheral edema caused by the use of calcium channel blocker monotherapy (Makani et al., 2011). The following are the initial dosage of each alternative medication:

Alternative Medication

Initial Dosage

Lotrel – amlodipine and benzepril

1 tablet 2. 5mg/10mg per orem every morning

Teczem – diltiazem and enalapril

1 to 2 tablets of 180mg/5mg per orem every morning

Lexxel – felodipine and enalapril

1 tablet of 2. 5mg/5mg per orem each day

Source: Comerford, 2015: 1529; Wolters Kluwer & Lippincott, 2010; King & Brucker, 2011: 404

Significance of Patient Teaching

BMI between 30 to 34 is classified as " obese 1" whereas BMI between 35 to 40 is classified as either " obese II or III" (University of Vermont, 2015). The fact that the patient's BMI is 32 strongly suggests that the patient is obese. To prevent the risks of developing serious organ damage (i. e. stroke or heart failure); patient teaching should focus on the need to encourage the patient to change or modify his lifestyle.

In general, BP of more than 140/90 is classified as " Stage 1" hypertension (OConnell, 2014: 12). Given the fact that obesity is one of the possible causes of hypertension (OConnell, 2014), patient teaching should include weight control through proper diet and exercise. For example, aside from eating foods that contains too much salt, O'Connell (2014) mentioned that

having a diet with high content of saturated fats combined with very few green vegetables and fruits are some of the possible causes of hypertension. For this reason, the nurse practitioner should teach the patient the need to eat foods with low salt content and low saturated fats while increasing their vegetables and fruit intake.

Patient teaching should also include adverse reactions or side effects to the medication. For example, when administering Lexxel, nurse practitioner should inform the patient that this particular drug could trigger severe hypotension in rare cases (King & Brucker, 2011: 404).

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