



Libyan International Medical University Faculty of Basic Medical Science

Effects	of	hvner	tensive	drugs	on	oral	cavity
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Submitted by: Mohamed osama elsharif

Supervisor: Dr.Aisha

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This report was written to fulfil the requirement of the oral cavity Block.

Abstract:-

Hypertension management in dental office includes disease recognition and correct measurement, knowledge of its treatment and oral adverse effects, and risk assessment for dental treatment. Dentist role in screening undiagnosed and undertreated hypertension is very important since this may lead to improved monitoring and treatment , aim of this study is to describe the effects of hypertensive drugs on oral cavity. (1)

Introduction:-

Hypertension is a common disease. Its wide spreading, terrible consequences, and lifelong treatment require an attentive approach by dentists, Hypertension is defined as values >140 mmHg SBP and/or >90 mmHg DBP, Some medicines cause dry mouth and contribute to the drying of saliva and other thinks, including antihypertensive drugs, so it is always advised patients taking these drugs increase the amount of fluid in the body, and consult the dentist. (1)

Discussion:-

In UK, they took 200 people with have blood pressure used in young, middle-aged, and elderly subjects, whereas different criteria, and 30% of people had problems with the oral cavity e.g. Dry mouth, Gingival Hyperplasia.

Oral Manifestations Caused by the Adverse Effects of Antihypertensive Drugs. (2)

1. Xerostomia

Many antihypertensive medications like angiotensin converting enzyme inhibitors (ACEIs), thiazide diuretics, loop diuretics, and clonidine are associated with xerostomia. Its likelihood increases with the number of concomitant medications. Xerostomia has many consequences, like decay, difficulty in chewing, swallowing, and speaking, candidiasis, and oral burning syndrome. Sometimes the feeling is transient and salivary function is adjusted by the patient itself. There are situations when is required to change the antihypertensive medication. It is often necessary to treat xerostomia directly with Para sympathomimetic agents such as pilocarpine or cevimeline. Other recommendations include frequent sipping of water, sugarless candies, coffee consumption reduction, and avoiding alcohol containing mouthwashes. To reduce the risk of caries topical applications of fluoride, particularly in the form of gels with high concentrations applied by brush or trays. (4)

2. Gingival Hyperplasia

It can be caused by calcium channel blockers, with an incidence ranging from 6 to 83%. The majority of cases are associated with nifedipine. The effect could be dose related. Gingival hyperplasia is manifested by pain, gingival bleeding, and difficulty in mastication. A good oral hygiene greatly reduces its incidence. By changing antihypertensive medication hyperplasia can be reversed. (4)

3. Lichenoid Reaction

Many antihypertensive (thiazide diuretics, methyldopa, propranolol, captopril, furosemide, spironolactone, and labetalol) are associated with oral lichenoid reactions. Clinical forms differ greatly from lichen planus itself. The easiest way to treat it is to change antihypertensive medication, and lichenoid reactions are resolving after discontinuation of the responsible drug. If medication could not be changed, lichenoid reactions are treated with topical corticosteroids. (4)

4. Other Undesirable Effects

ACE inhibitors are associated with cough and loss of taste (ageusia) or taste alteration (dysgeusia). Dysgeusia has also been reported with other antihypertensive use, like β -blockers, acetazolamide, and diltiazem. It has been postulated that dysgeusia may result through a mechanism affecting salivary handling of metal ions such as magnesium.(5)

Conclusion:

Hypertension is the most commonly diagnosed disease worldwide. Many patients with hypertension have uncontrolled disease. The dentist has an important role in screening undiagnosed and undertreated hypertension, which may lead to improved monitoring and treatment. It is generally recommended that emergency dental procedures be avoided in patients with a blood pressure of greater than 180/110 mmHg. Because of the high prevalence of disease and medication use for hypertension, dentists should be aware of the oral side effects of antihypertensive medications. Also, dentists should consider management of drug-drug interactions of antihypertensive with medications commonly used during dental visits.

References:-

- 1. J. Hogan and J. Radhakrishnan, "The assessment and importance of hypertension in the dental setting," Dental Clinics of North America, vol. 56, pp. 731–745, 2012. <u>View at Google Scholar</u>
- 2. M. Dorobantu, R. O. Darabont, E. Badila, and S. Ghiorghe, "Prevalence, awareness, treatment, and control of hypertension in Romania: results of the SEPHAR study," International Journal of Hypertension, vol. 2010, Article ID 970694, 6 pages, 2010. <u>View at Publisher</u> · <u>View at Google Scholar</u>
- 3. E. Cinteza and M. Balgradean, "Hypertension in Romanian children and adolescents: a cross-sectional survey," Maedica, vol. 8, no. 1, pp. 5–10, 2013. View at Google Scholar
- 4. M. Dorobanţu, R. Darabont, S. Ghiorghe et al., "Profile of the Romanian hypertensive patient data from SEPHAR II study," Romanian Journal of Internal Medicine, vol. 50, no. 4, pp. 285–296, 2012. View at Google Scholar
- 5. J. Perk, G. De Backer, H. Gohlke, I. Graham, Z. Reiner, and M. Verschuren, "European guidelines on cardiovascular disease prevention in clinical practice (version 2012): the fifth joint task force of the european society of cardiology and other societies on cardiovascular disease prevention in clinical practice (constituted by representatives of nine societies and by invited experts) developed with the special contribution of the European association for cardiovascular prevention & rehabilitation (EACPR)," European Heart Journal, vol. 33, no. 13, pp. 1635–1701, 2012. View at Publisher · View at Google Scholar
- 6. Ganong's /Review of medical physiology / 23rd Edition /p.330