

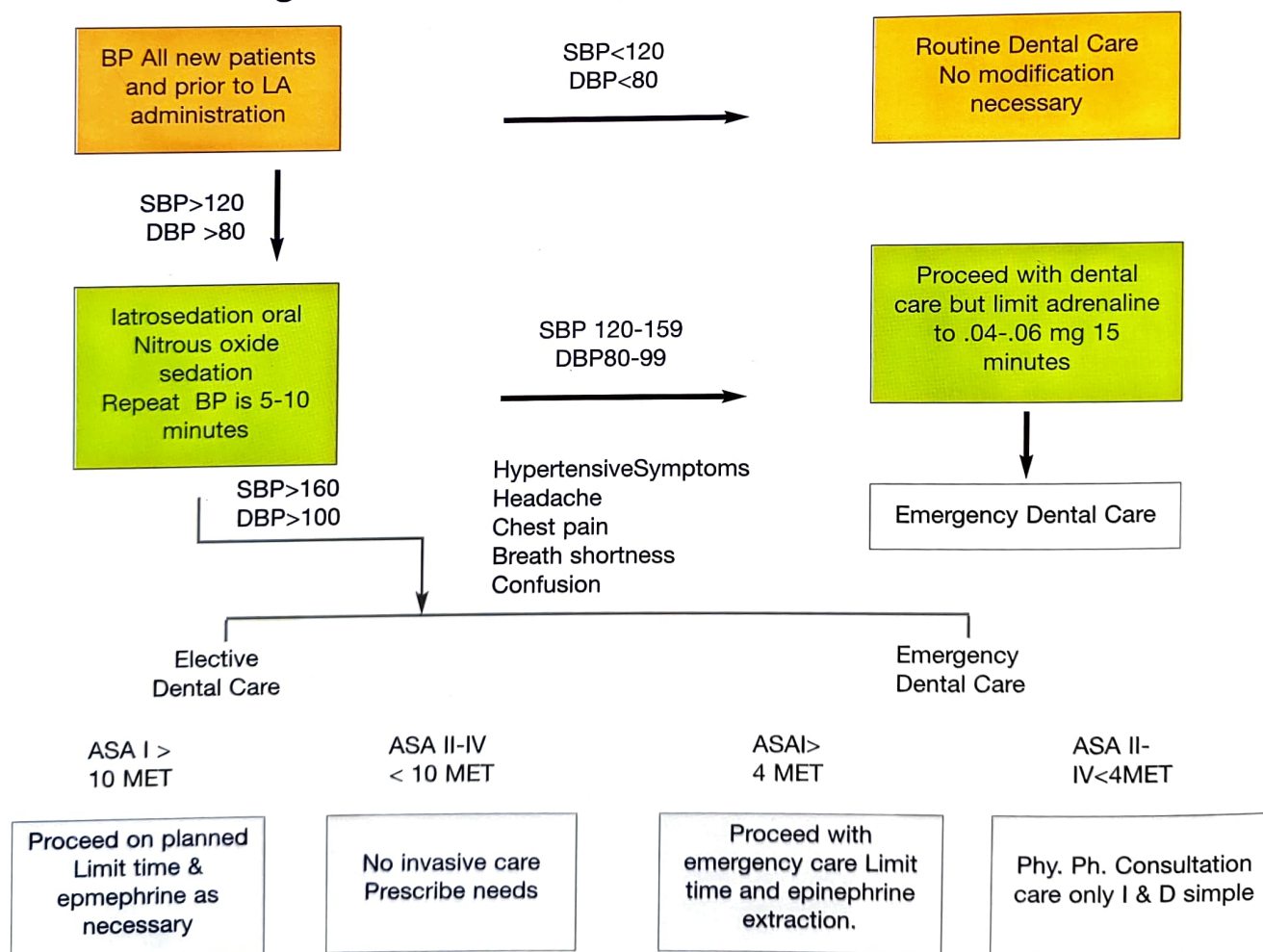
DENTAL AND PHYSIOLOGIC CONSIDERATIONS IN HYPERTENSIVE PATIENTS

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INTRODUCTION

Hypertension one of the most common Medical Problems a dentist comes across while treating patients. Dental Management in Hypertensive patients can be complicated. Since any procedure causing stress can elevate the Blood Pressure more and can increase the risk of adverse acute complications like cardiac arrest or cerebrovascular accident. Chronic complications of hypertension such as renal disease, cardiovascular disease can affect dental treatment.

Algorithm for treating hypertensive patient



DENTAL CONSIDERATIONS - HYPERTENSIVE PATIENTS

Timing of Dental Appointments for Hypertensives

The increase of BP in Hypertensive patients is associated with the hours surrounding awakening that peaks by mid-morning. This fluctuation of BP tends to be less likely in the afternoon. Afternoon appointments are recommended over mornings for this reason.

Orthostatic Hypertension

This problem occurs in varying patients using in all hypertensive drugs. A dentist should return patient slowly to upright position following dental care and to have them sit on the chair for 30-60 seconds before standing.

Relationship between hypertension, sleep apnea & Dentistry

Sleep apnea is partial /complete obstruction of the upper airway while sleeping. This leads to less restful sleep, daytime somnolence and hypertension. Oral Appliances which advance the mandible during sleep can help lower BP in few of these patients. A 4 weeks trial on patients who wore the device which advanced the mandible 7 mm reduced the Diastolic BP by 1.8 mm.

The Dentist Blood Pressure

Dentists should be mindful of their own health, have their BP monitored frequently studies have shown elevation in dentist BP during administration of local anesthesia into patient's mouth.

Hypertension and Intra operative bleeding

Elevated BP leads to increased intra operative bleeding. It is of more importance during oral surgery procedures. Appropriate precautions have to be taken while reducing fractures, extractions & alvcoloplasty. Hypertensive patient may be given hypotensive anesthesia while such procedures. If the patient is taking anticoagulants. Example . Warfarin or aspirin he needs to be taken off these medicines for surgical procedures.

Antihypertensive Medicines

Drugs	Mechanism of Action	Oral adverse/ Side Effects
Diuretics	Reduce Blood Volume, vascular resistance	Dry mouth Lichenoid Reaction
Beta Blockers	Reduce heart rate and force of contraction	Dry mouth taste change Lichenoid reactions
ACE inhibitions	Retard resin angiotensin system	Angioedema ulceration dry mouth
Calcium Channels Blockers	Decrease Heart rate, force of contraction	Gingival enlargement
Alpha blockers	Cause vasodilation	Dry mouth
Direct acting vasodilators	Relax vascular smooth muscles	Increased risk of gingival bleeding, infection
Central acting agents	Promote vasodilatation	Dry mouth taste changes parotid gland pain
Angiotension 2 antagonists	Promote vasodilatation	Loss of Taste sensation - dry mouth angioedema

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