

#medicinefordentists

VESSELS

HYPERTENSION

>180/100=No dentistry

If BORDERLINE

- light Sedation, no epinephrine, early and short appointment

HYPERTENSIVE

URGENCY

>180/110=FAMILY MD

HYPERTENSIVE

EMERGENCY

Headache, blurred vision, chest pain, dyspnea = HOSPITAL

ATHERO

SCLEROSIS

CORONARY

ARTERY DISEASE

MI wait > 3-6 months

MI Treatment: Call

911, Oxygen, ASA

325mg, Place AED

pads

CEREBRO-

VASCULAR

DISEASE

Ischemic stroke: wait >

9 months

Stroke Treatment: Call

911, monitor vitals

PERIPHERAL

VASCULAR

DISEASE

If develop Deep Vein

Thrombosis (DVT)

- need clearance from MD prior to procedure

ANEURYSM

ASK: MONITORED OR TREATED?

If monitored:
REQUIRES well controlled blood pressure

VALVES

AORTIC/MITRAL REGURGITATION/ STENOSIS

3 MAIN PROBLEMS can occur as a result:

- Atrial Fibrillation
- Congestive Heart Failure
- Pulmonary HTN

CHRONO

TROPIC

ATRIAL FIBRILLATION

2 MAIN

CONCERNS:

1. A **blood clot** can be fired off to any end organ from the heart
2. Uncontrolled and potentially **lethal tachycardia**

SO CONFIRM

1. **Anticoagulation**
 - if not on more than plavix/ASA, speak to MD to confirm
2. **Beta Blockers**
 - ensure taken day of surgery

INOTROPIC

CONGESTIVE HEART FAILURE

Results in:

3. Increased Bleeding
4. Difficulty Breathing
5. Fatal Arrhythmia

Ejection Fraction <

30% requires:

- Implantable Cardioverter Defibrillator
- Anticoagulation

WHAT YOU SEE:

Orthopnea
Pedal Edema

WHAT YOU DO:

1. Seat patient UP
2. Break procedure UP
3. Consider
 1. local hemostasis
 2. Obtain INR

CARDIO MYOPATHY

80% ISCHEMIC

CARDIO

MYOPATHY

= Coronary artery disease

20% NON-ISCHEMIC

CARDIO

MYOPATHY

3 Types:

1. **Dilated**
 - result of Alcohol and Cocaine
 - causes congestive heart failure
2. Restrictive
3. Hypertrophic

Antibiotic Prophylaxis

1. Prior Infective ENDOCARDITIS
2. Prosthetic HEART VALVE or prosthetic material used for valve repair
3. Cardiac TRANSPLANT with valvulopathy
4. Incomplete/non-repaired **SERIOUS CONGENITAL** heart defect
5. Completely repaired **CONGENITAL** heart defect with a prosthetic device and
 - Residual defect
 - Within the first 6 months
6. **Dialysis patients with Atrio-Venous fistula
7. +/- 2 yrs Hip/Knee replacements

Pacemakers/ Implantable Cardioverter Defibrillators

- A. Maintained and MONITORED every 3-6 months
- B. ELECTRO-CAUTERY requires deactivation magnet with ICD
- C. CPR - deactivation magnet is ideal. - check with all ICD patients

MAJOR CLINICAL PREDICTORS

(Hypertensive emergency/urgency, MI < 3 mo, stroke < 9 mo, Severe valvular disease, Severe congestive heart failure, Poorly controlled arrhythmia, severe congenital heart defects)

- Do not operate

INTERMEDIATE CLINICAL PREDICTORS

(Uncontrolled hypertension, History of MI or Stable angina, Controlled valvular disease, Controlled congestive heart failure, controlled arrhythmia, congenital heart defects)

- METS < 4, obtain medical clearance
- METS >4 proceed

MINOR CLINICAL PREDICTORS

(Age > 70, Elevated blood pressure, History of stroke > 9 months)

- Proceed

METS < 4 = light housework

METS > 4 = walking up one flight of stairs

METS > 10 = exercise

Asthma

Is Asthma Controlled?

1. **Daytime symptoms/need for ventolin** < 4 days/week
2. **Nighttime symptoms:** <1 night/week
3. **Physical activity:** normal
4. **Asthma exacerbations within the last 12 months:** mild, infrequent

ASTHMA ATTACK

1. Administer **Oxygen** to maintain O₂sats >92%
2. **Ventolin** (short acting B₂ agonist): 4-8 puffs q20 min via MDI or 5mg q20 min via Nebulizer x 3 doses
3. **Epinephrine:** 0.3-0.5mg SC 1:1000 every 15 minutes (if unresponsive to ventolin and deteriorating - decreased O₂ saturation)
4. **Call 911** *use clinical judgement (e.g. not required if symptoms are mild and quickly resolve with use of ventolin)

AVOID NSAIDS/ASA

COPD

Who is NOT controlled?

1. multiple **hospitalizations** for exacerbations
2. frequent lower **respiratory tract infections**
3. on **oxygen**

COPD EXACERBATION

1. **Call 911** because they need to receive BiPAP and possible antibiotics

2. (BiPAP = bilevel positive airway pressure)
3. **OXYGEN** - < 4 L min
4. **Ventolin:** 4-8 puffs q20 min via MDI or 5mg q20 min via Nebulizer AND **Ipratropium:** 4-8 puffs q30min via MDI or 0.5mg q30min via nebulizer x 3

AVOID NITROUS OXIDE

OSA

Screen via:

1. Epworth Sleepiness scale (>=10 indicates positive excessive daytime sleepiness)
2. STOP BANG
Snoring, Tired, Observed, Pressure, BMI, Age, Neck size, Gender (0-2 = low risk, 3-4 = medium risk, 5-8 high risk)

Underlying comorbidities

HTN, Pulmonary HTN, Heart Failure, stroke, A. Fib, Myocardial Infarc.

Obesity

- **BMI = weight/(height)²**
- 18-25 - normal
- 25-30 - overweight
- 30-35 - mild obesity
- 35-40 - mod. obesity
- >40 - severe obesity
- **Effects of Obesity:**
- **Cardiac:**
- CHF (atrial dilation - atrial fibrillation - stroke)
- **Pulmonary:**
- OSA and Obesity-Hypoventilation syndrome
- **Endocrine:**
- Metabolic Syndrome (HTN, Insulin Resistance, Dyslipidemia)

- **Liver**
- Hepatobiliary disease

Aspiration

CAUTION WITH ELDERLY AND DIABETICS

ASPIRATION TX:

- **STEP 1:**
- Suction, **Trendelenburg** + head to the side, Encourage coughing
- **STEP 2:**
- Administer Oxygen, Short acting B₂ agonist (prn wheezing)
- Call 911/Send to Hospital for chest xray

Restrictive Lung Disease

- can be caused by long standing **morbid obesity**
- can cause **right heart failure**

Pulmonary HTN

Causes: COPD, heart disease, OSA

Results in: right heart failure

- These patients can be **anticoagulated**
- May only tolerate short appointments

Venous Thromboembolism

- Risk Factors: surgery > 1 hour, > 60 years old, obese, pregnant,
- anticoagulated for **3-12 mo** or **indefinitely**
- May delay surgery until after anticoagulation