

Conduction system of the heart



**ASSIGN
BUSTER**

The Normal Conduction system of the heart A Labelled P QRS and T wave seen on a single Lead ECG complex. | What is the heart rate in sinus rhythm Normal sinus rhythm is the rate of around 60 - 100 beats per minute (bpm) What is the definition of sinus tachycardia Sinus tachycardia is the rhythm with an elevated amount of impulse which is greater than 100bpm. What is the definition of sinus bradycardia This is a rate which originates from the sinus node which is less than 60bpm (Marleb & Holen 2007) Atrial Fibrillation Labelled ECG showing Atrial Fibrillation | Signs and symptoms of Atrial Fibrillation Atrial fibrillation is the reduction heart efficiency and performance. Some people have no signs and symptoms and only are diagnosed through routine test and investigation.

But the main symptoms are of tiredness, breathlessness, dizziness and also chest pain angina. Causes of Atrial Fibrillation The exact causes are unknown but the main causes ischemic heart disease, acute illness, electrolyte abnormalities and also thrombosis (Royal Marsden 7th Edition 2010) What treatment options are available for A. F Medication is a main treatment but does depend on the type and severity of A. F but beta blockers. Pacemakers and also warfrin are also treatment possibilities. Why do patients with long term A.

F require anticoagulation therapy The patient requires these types of medication to help slow the rate in which patients would acquire blood clots. What is the aim of electrical cardio version Try to restore a normal rhythm by electric shock but would need at least 4 days administration due to blood clots being a symptom. Acute ST elevation myocardial infarction Name two ACE inhibitors and one thing you would need to check before administering

these drugs to a patient Two types of ace inhibitors are captopril and also Ramipril Also and INR test would be conducted to find out how quickly the blood clots.

What Lifestyle Changes would you advise a patient admitted to hospital with an acute coronary syndrome and why Lifestyle changes can help prevention and worsening of the disease the ones you can do something about are: * Smoking * High blood pressure * High blood cholesterol * Physical inactivity * Being overweight or obese and * Diabetes. Patients admitted with cardiac sounding chest pain are screened for diabetes Why is this Patients are screened for diabetes due to the fact that diabetes significantly increases the developing coronary heart disease. Acute coronary syndrome How would you correctly administer enoxaprine (Clexane) Administer vertically and not at an angle, Patients with cardiac sounding chest pain are given a GTN spray or intravenous GTN infusion.

Why is this given what effect does it have on the heart It is used to temporarily enlarge (dilate) the blood vessel of the heart thereby increasing the blood flow to the heart. Name two statins and explain why they are used in heart disease Simvastatin and pravastatin are to help cholesterol levels and reduce heart attack. Name two beta blockers and name two things you would need to check before administering them to a patient Check heart rate and blood pressure due to beta blockers lowering the heart rate and blood pressure. Two types of beta blockers are bisoprolol and also betaxolol. Acute Myocardial Infarction What is the aim of administering thrombolysis This is given in presence of a heart attack to break down blood clots. What pain relief medication would be given to a patient with a acute myocardial

infarction and why A GTN spray would be given which would open the arteries to help blood pass through the heart. Other drugs which can be administered to relieve pain would be beta blockers and also aspirin.

Why does a patient admitted with an MI need to remain on bed rest for 12 hours then followed a mobility plan? Bed rest reduces physical fitness and impairs the reflexes that prevent an undue fall of blood pressure when we assume the upright position. General weakness and dizziness leads to severity of heart attack. Regular exercise and altering the posture of patient help to overcome these problems and improve patient morale. Most patients are able to sit up in chair and take a few steps within 24 hrs of heart attack.

As the days in hospital pass, exercise increases but the patient must avoid undue tachycardia. Before discharge patient must climb stairs in hospital.