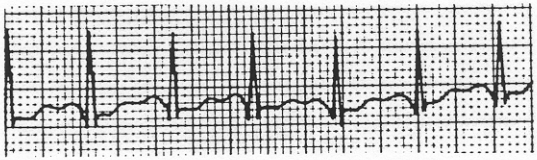
Phasic Sinus Arrhythmia. Phasic sinus arrhythmia is normal and related to the phases of respiration.

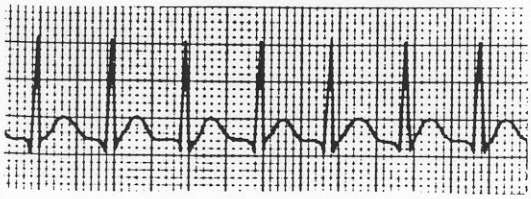
Sinus Tachycardia. Sinus tachycardia is defined as a rate that exceeds 100 beats/minute, and may be caused by anxiety, fright, hypovolemia, hyperpyrexia, severe anemia, and so forth. The underlying cause must be identified and treated.



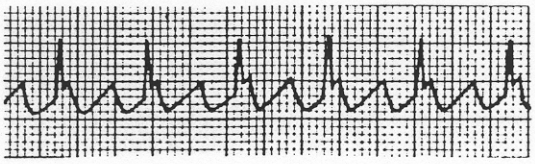
Junctional Rhythm. Junctional rhythm may be normal due to increased parasympathetic tone. The loss of atrial contribution to cardiac output may require an Atropine trial (0.4 mg bolus administered intravenously).

Paroxysmal Atrial Tachycardia (PAT). PAT is a spontaneous event in healthy young troops; carotid sinus pressure can be effective. Give Verapamil at a dose of 0.05-0.075 mg/kg over 2 minutes intravenously. Digoxin (0.5 mg administered intravenously) over 2 minutes in addition, may be very effective.

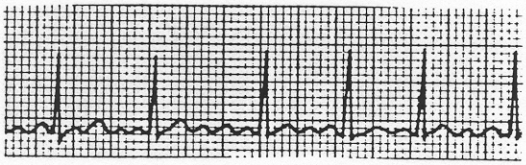
Paroxysmal Junctional Tachycardia. Administer the same therapy as given for PAT.



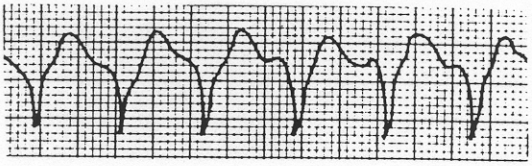
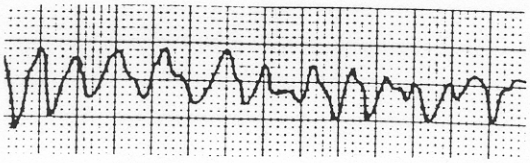
Atrial Flutter. Atrial flutter is defined as an atrial rate of 300 and a ventricular response of approximately 150. Ninety-five percent of patients with atrial flutter convert to normal sinus rhythm (NSR) with DC cardioversion, the treatment of choice. Verapamil and Digoxin slow the ventricular response. Quinidine is not indicated until the ventricular rate is less than 100.



Atrial Fibrillation. New onset of atrial fibrillation is accompanied by rapid ventricular response. If the patient is hemodynamically unstable, cardioversion should be attempted. Give Digoxin (0.5 mg intravenously) ±Verapamil (5-10 mg) to control the ventricular response.



Ventricular Tachycardia. Ventricular tachycardia exhibits a wide QRS complex and dissociated P waves. This rhythm is commonly seen in wounded, hypotensive, acidotic, terminal patients. Empiric therapy with $MgSO_4$ (a 2-mg intravenous push) can be very effective. Cardioversion while volume resuscitation is achieved is life saving. Subsequent antiarrhythmics are rarely needed.



Ventricular Fibrillation. Ventricular fibrillation is treated with DC shock (200 joules). This rhythm is commonly seen in patients with volume depletion or acidosis. Correction of the latter mitigates the need for antiarrhythmics.