Reviewed/revised 2/2010

STABLE / UNSTABLE TACHYCARDIA

1. Cardiac **Monitor**, analyze rhythm. Confirm tachycardia, rate > 160.
2. Check oxygen saturation on room air, consider applying oxygen supplementation if SaO_2 < 90%.
3. Establish **IV LR or NS TKO**
4. Tachycardia may be compensatory in hypovolemia, shock, sepsis, etc. Consider non-cardiac causes of tachycardia that should not be treated as a primary arrhythmia.
5. Evaluate patient stability
    a. **Stable** (patient conscious and alert, systolic BP>90, no chest pain or pulmonary edema)
        i. Valsalva maneuver.
        ii. Consider Adenosine administration for narrow complexes:
            1. If patient is age 18 or older, no history of WPW with a heart rate > 160, administer **Adenosine** 6mg IV bolus. Repeat **Adenosine** once at 12mg IV if no response. Continuous monitoring before and during administration.
            2. For patients less than age 18, Contact Medical Control.
        iii. **Contact Medical Control.**
        iv. Transport patient to hospital.
    b. **Unstable** (decreased consciousness, systolic BP<90, chest pain, or pulmonary edema and arrhythmia is the suspected cause.
        i. Consider Adenosine administration for narrow complexes:
            1. If patient is age 18 or older, no history of WPW with a heart rate > 160, administer **Adenosine** 6mg IV bolus. Repeat **Adenosine** once at 12mg IV if no response. Continuous monitoring before and during administration.
            2. For patients less than age 18, do not administer adenosine.
        ii. Consider Cardioversion
            1. Adult cardioversion
                a. If patient is conscious and alert, consider sedation.
                    i. Consider **Midazolam**: Draw 0.2 mg/kg up to 10mg of 5mg/ml solution for delivery by atomizer device, ½ in each nostril, or 0.2 mg/kg up to 10mg I.M., or 0.1 mg/kg I.V up to 5 mg I.V. Administer slowly until patient calm, speech slightly slurred. Be prepared to support ventilation if needed.
                b. Synchronized Cardioversion at 100J or biphasic 75J* (or manufactures recommendation)
                c. Synchronized Cardioversion at 200J or biphasic 120J* (or manufactures recommendation)
                d. Synchronized Cardioversion at 300J or biphasic 150J* (or manufactures recommendation)
                e. Synchronized Cardioversion at 360J or biphasic 200J* (or manufactures recommendation)
                f. **Contact Medical Control.**

            2. Pediatric cardioversion
                a. Patient < 6 months contact medical control.
                b. Patient age 6 months-18 years, wide complex tachycardia, altered LOC and hypotensive. (Must meet all criteria)
                    i. Hypotensive if patient 6 months-10 years, systolic < 70.
                    ii. Hypotensive if patient 10 years-18 years systolic<90.
                c. Pediatric kg. Weight estimation by length based tape or: 10 + (2 X Age in years)
                d. Synchronized cardioversion at 0.5-1 J/kg (double for 2nd and subsequent cardioversions), up to three attempts.
                    i. ***When converted, use appropriate protocol.***
                e. **Contact Medical Control.**