Aortic Dissection (AoD) Protocol

**Assessment and Indication**
- Acute, severe **chest, back, or abdominal pain** (ripping, tearing, stabbing, or sharp)
- **High risk history** (connective tissue disease, genetic markers, known aneurysm, recent aortic manipulation, family Hx of dissection, smoker)
- **Clinical findings** (pulse deficits, SBP limb differential > 20 mmHg, new murmur)
- CT chest **without** contrast STAT, and
- CT chest/abdomen/pelvis **with** contrast (no oral) with thinnest cuts possible
- Obtain 12 lead EKG and labs (Lactate, D-dimer, Type & Cross, BMP, CBC, INR)
- Label films “STAT AoD” and transmit to 612-863-4941, or send with patient

**Initial Management**
- Contact Minneapolis Heart Institute® at 612-863-3911 to page cardiologist, and either cardiothoracic surgeon for a Type A consult, or vascular surgeon for a Type B consult
- Activate emergency transport team (air, if not contraindicated)
- NPO, monitor, 2 large bore IVs, draw labs – **DO NOT PLACE FOLEY CATH**
- **Maintain Systolic BP between 90-110 mmHg and HR < 60**
  - **1st Option:** Esmolol: 500 mcg/kg IVP over 1 min followed by continuous infusion at 25-50 mcg/kg/min, increase every 4 min by 25 mcg/kg/min to max rate of 300 mcg/kg/min
  - **2nd Option:** Metoprolol: 5 mg IVP over 5 min, may repeat X 2 if necessary
- **If Beta-blocker contraindicated:** Nicardipine: 5 mg/hr continuous infusion, increase by 2.5 mg/hr every 5-15 min to max rate of 15 mg/hr
- **For secondary BP control:** Nitroprusside: 0.2 mcg/kg/min continuous infusion, increase by 0.2 mcg/kg/min every 5 min to max rate of 10 mcg/kg/min
- Morphine Sulfate: 2-4 mg IVP, prn OR Dilaudid: 0.2-0.3 mg IVP, prn
- Oxygen: to maintain SpO2 ≥ 92%
- Consider IV Vitamin K if patient is on Coumadin
- Transfer with PRBC if able
- If awaiting transport, place arterial line (DO NOT delay transport)

“Guidelines are not meant to replace clinical judgment or professional standards of care. Clinical judgment must take into consideration all the facts in each individual and particular case, including individual patient circumstances and patient preferences. They serve to inform clinical judgment, not act as a substitute for it. These guidelines were developed by a Review Organization under Minn. Stat. §145.61 et. seq., and are subject to the limitations described at Minn. Stat. §145.65.”

This information is intended only as a guideline. Please use your best judgment in the treatment of patients.