5th Generation Troponin - sensitive

- Male <15ng/L, Female <10ng/L
- Check troponin at 0hr, 2hr, and 6hr (if required) - delta >10-12 ng/L, with EKG changes, typical chest pain
- Elevated values = myocardial injury and not necessarily acute myocardial infarct
- Risk stratification = clinical context, ECG results, and sometimes, serial hs-cTnT values

Hypertension

Treating Hypertension to Reduce the Incidence of HF

<table>
<thead>
<tr>
<th>COR</th>
<th>LOE</th>
<th>Recommendations</th>
<th>Comment/ Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>B-R</td>
<td>Stage A HF, goal &lt;130/80 mm Hg.</td>
<td>NEW: Recommendation reflects new RCT data.</td>
</tr>
</tbody>
</table>

2017 ACC/AHA/HFSA Focused Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure
### Severity of bleeding

- 1. Critical site?
- 2. Hemodynamically unstable
- 3. Hb drop ≥2 g/dl or need for 2+ Unit RBC

If any 3 is yes - Stop DOAC

- Charcoal if ingested <2 hours
- CKD/ ESRD: HD may be indicated

### Oral Anticoagulant

<table>
<thead>
<tr>
<th>Oral Anticoagulant</th>
<th>First Line, when available</th>
<th>Second Line</th>
<th>For All Patients</th>
<th>Not Indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dabigatran (Pradaxa)</td>
<td>5g Idarucizumab (Praxbind) IV</td>
<td>4F-PCC or aPCC</td>
<td>Activated charcoal (within 2-4 hours)</td>
<td>Plasma</td>
</tr>
<tr>
<td>Edoxaban (Savaysa)</td>
<td>4F-PCC</td>
<td>aPCC</td>
<td>Activated charcoal (within 2-4 hours)</td>
<td>Idarucizumab, Plasma</td>
</tr>
<tr>
<td>4F-PCC (K-Centra)</td>
<td>4 Factor Prothrombin Complex Concentrate- 50 units/kg IV Factors II, VII, IX, X</td>
<td>aPCC</td>
<td>Activated Prothrombin complex concentrate- 50 units/kg IV</td>
<td>All factors in inactive and active form</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral Anticoagulant</th>
<th>Last Dose &lt; 8 hours / unknown</th>
<th>Last Dose &gt; 8 hours</th>
<th>Second Line</th>
<th>For All Patients</th>
<th>Not Indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apixaban (Ellipta) (&gt; 5mg) and Rivaroxaban (Xareleto)</td>
<td>High dose Andexanet</td>
<td>Low dose Andexanet</td>
<td>4F-PCC or aPCC</td>
<td>Activated charcoal (within 2-4 hours)</td>
<td>Idarucizumab, Plasma</td>
</tr>
<tr>
<td>Apixaban (&lt; 5mg) and Rivaroxaban (≤ 10mg)</td>
<td>Low dose Andexanet</td>
<td>Low dose Andexanet</td>
<td>4F-PCC or aPCC</td>
<td>Activated charcoal (within 2-4 hours)</td>
<td></td>
</tr>
</tbody>
</table>

### Low Dose

- Initial IV Bolus: 400 mg at a target rate of 30 mg/min Follow-on IV infusion: 4 mg/min for up to 120 minutes

### High Dose

- Initial IV Bolus: 800 mg at a target rate of 30 mg/min Follow-on IV infusion: 8 mg/min for up to 120 minutes
Retrospective cohort study 445 371, adults, 801 261 hospitalizations, 1/2010-12-2014

a) Moderate anemia (Hb 7-10 g/dL) at discharge increased from 20% to 25% (P < 0.001)
b) RBC transfusion declined by 28% (39.8 to 28.5 RBC units per 1000 patients; P < 0.001).
c) Patients: moderate anemia resolved within 6 months of discharge decreased from 42% to 34% (P < 0.001)
d) RBC transfusion decreased: 19% to 17%
e) 6-month Re-hospitalization: decreased from 37% to 33% (P < 0.001 for both).
f) 6-mth mortality rate decreased from 16.1% to 15.6% (P = 0.004)

Infectious Diseases Consultation Reduces 30-Day and 1-Year All-Cause Mortality for Multidrug-Resistant Organism Infections
- Open Forum Infectious Diseases 2018;5(3):1-5.

Study Overview
- Retrospective cohort study: 4214 patients with MDROs in a sterile site or bronchoalveolar lavage/bronchial wash culture.
- ID consultation:
  - Reductions in 30-day and 1-year mortality for
    - Resistant S. aureus (HR, 0.48; 95% CI, 0.36–0.63; and HR, 0.73, 95% CI, 0.61–0.86).
    - Enterobacteriaceae (HR, 0.41; 95% CI, 0.27–0.64; and HR, 0.74, 95% CI, 0.59–0.94).
  - And in 30-day mortality for
    - Polymicrobial infections (HR, 0.51; 95% CI, 0.31–0.86).
  - But no reduction for Acinetobacter, Pseudomonas, or Enterobacter, possibly due to small sample sizes.
- 70 yr. lady admitted for failed out-patient pneumonia treatment, receiving IV levofloxacin day # 3, now has 3+ watery stools, Stool C-diff +ve
  - Vital stable, minimal abdominal tenderness, non-toxic, How do you manage?
    - A. Metronidazole 500mg p.o. TID for 14 days
    - B) Vancomycin 125mg p.o. QID for 14 days
    - C) Vancomycin 125 mg p.o. QID for 10 days
    - D) Fidaxomycin 200 mg p.o. BID for 10 days
    - E) Refer patient for fecal transplant
<table>
<thead>
<tr>
<th>Clinical Definition</th>
<th>Supportive Clinical Data</th>
<th>Recommended Treatment</th>
<th>Strength of Recommendation/Quality of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial episode, severe</td>
<td>WBC ≥1500, Cr. &gt;1.5</td>
<td>• VAN 125 mg QID X 10 days Strong/High</td>
<td>Strong/High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• FDX 200 mg BID X 10 days Strong/High</td>
<td>Strong/High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If above agents are unavailable:</td>
<td>Weak/High</td>
</tr>
<tr>
<td>Initial episode, non-severe</td>
<td>WBC ≤1500, Cr. ≤1.5</td>
<td>Metronidazole, 500 mg TID X 10 days</td>
<td>Strong/Moderate</td>
</tr>
<tr>
<td>Fulminant episode, (Hypotension, shock, ileus, megacolon)</td>
<td>• VAN, 500 mg QID (p.o/ NG tube, if ileus add rectal instillation of VAN) + intravenously administered metronidazole (500 mg every 8 hours)</td>
<td>• VAN, 125 mg 4 times per day by mouth for 10 days followed by Rifaximin 400 mg 5 times daily for 20 days, OR FDX 200 mg given twice daily for 10 days, OR Fecal microbiota transplantation</td>
<td>Weak/High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strong/Moderate (oral VAN); Weak/Low (rectal VAN); Strong/Moderate (iv metronidazole)</td>
<td>Strong/Moderate</td>
</tr>
</tbody>
</table>

**Strength of Recommendation/Quality of Evidence**

- **Weak/Low**
- **Weak/Moderate**
- **Strong/Low**
- **Strong/Moderate**
- **Strong/High**

**Mortality of Hospitalised Internal Medicine Patients Bedspaced to Non-Internal Medicine Inpatient Units: Retrospective Cohort Study**

- AD Bai, S Srivastava, GA Tomlinson, CA Smith, CM Bell, et al.

**Study Overview**

- Retrospective cohort study of 3243 consecutive GIM admissions between January 1, 2015 and January 1, 2016. GIM wards (2118, 65%) and off-service wards (1125, 35%).
- **Inpatient mortality:**
  - 88/2118 (4%) of GIM ward
  - 88/1125 (8%) of off-service ward
- **Off-service patients had HR of 3.42** (95% CI 2.23 to 5.26; P=0.0001) for inpatient mortality at admission, but subsequently improved.
• Patient with Cr. 1.6, needs CT scan abdomen pelvis to rule out bowel perforation or abscess
• What would be your reno-protective strategy?
  A) n-Acetyl cysteine 1200mg, 2 and 12 hours before CT?
  B) NS at 150 ml/ hour for next 24 hours
  C) Nephrology consult
  D) Bicarbonate drip

Results
• Primary outcome: 37/957 (3.9%) of IPC patients and 41/985 (4.2%) of controls.
  RR 0.93 (95% CI, 0.60-1.44), P=0.74.
• PE or any lower limb DVT occurred in 103/991 (10.4%) of IPC patients and 95/1012 (9.4%) of controls.
  RR 1.11 (95% CI, 0.85-1.44).
• Death any cause, at 90 days:
  258/990 (26.1%) IPC and 270/1011 (26.7%).
  RR 0.98 (95% CI, 0.84 to 1.13).