

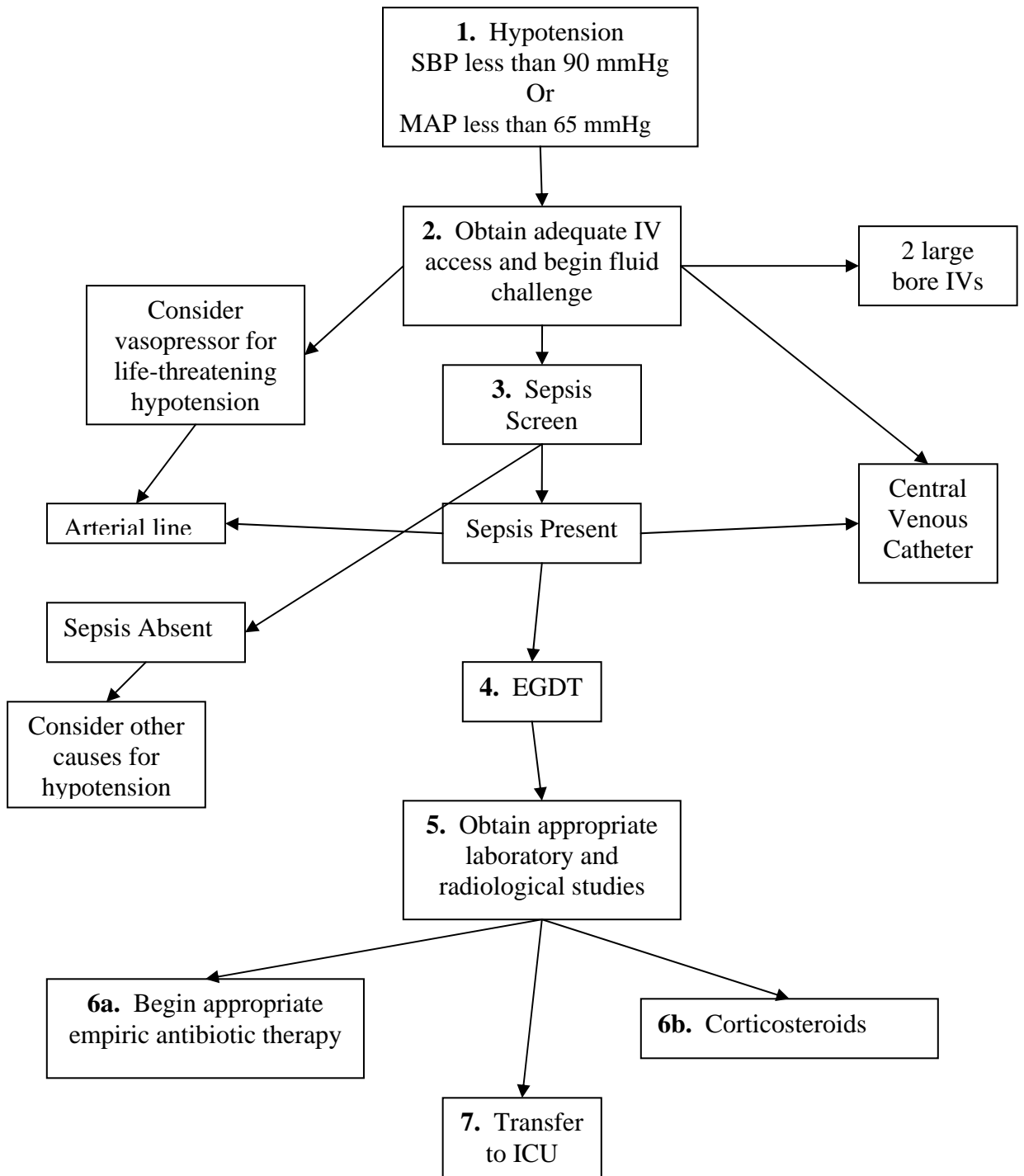
SEPSIS ALGORITHM

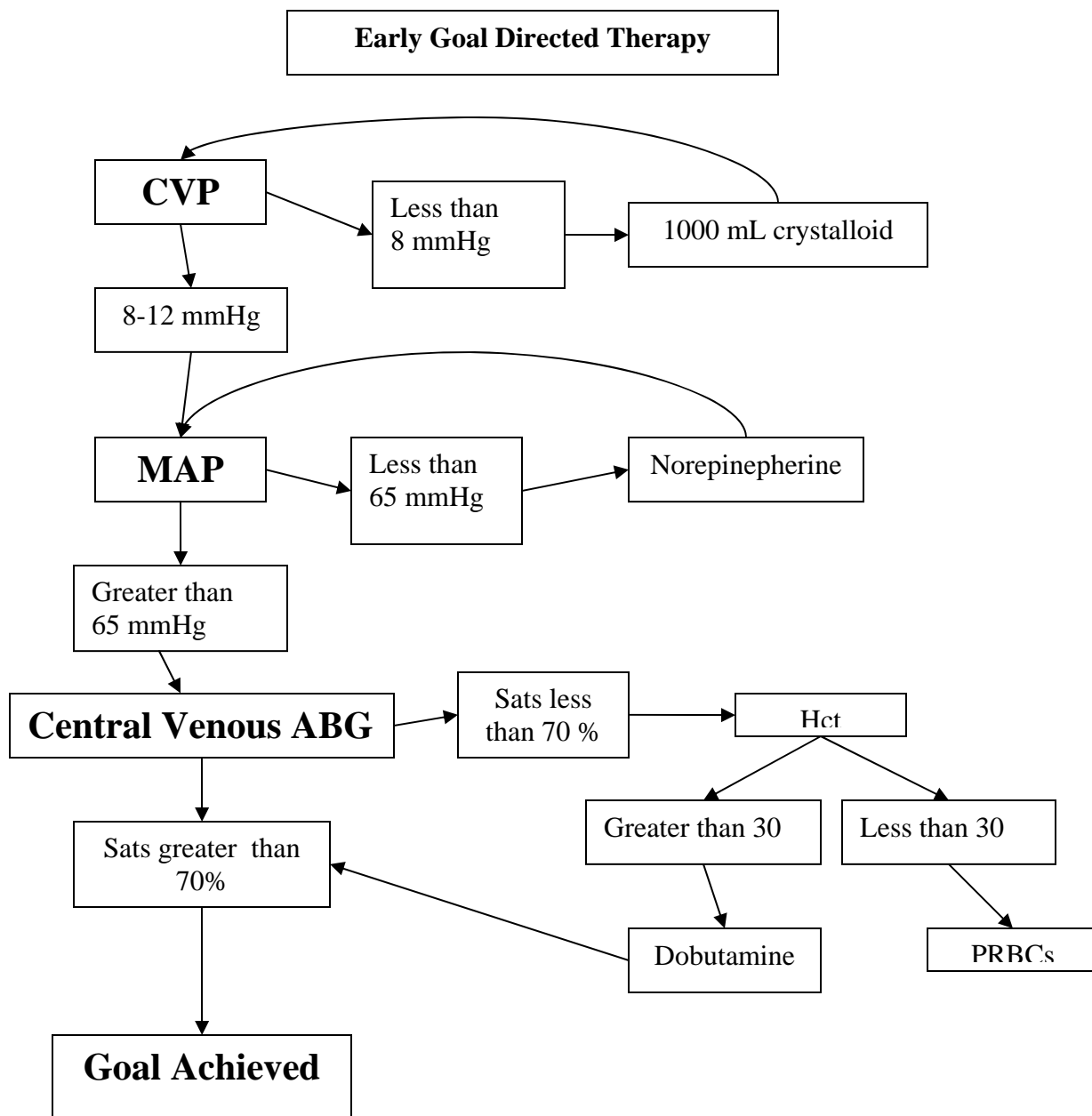
To be done within 1 hour of presentation

1. Any patient who presents to the ED with hypotension, defined as a systolic blood pressure less than 90 mmHg or a mean arterial pressure less than 65 mmHg, should be immediately triaged and evaluated for the potential diagnosis of sepsis.
2. Quickly obtain adequate IV access. Two 16 gauge peripheral IV's or a central venous catheter is required. Guidelines recommend placing a ScvO₂ Triple Lumen catheter. Begin fluid challenge with 20-30 mL/Kg over 30 minutes and reassess. Vasopressors are recommended for life-threatening hypotension while fluid resuscitation is underway. Norepinephrine should strongly be considered as first line. If vasopressors are initiated, an arterial line and central venous catheter should be placed immediately.
3. The patient should then be screened for sepsis.
 - A. SIRS: Temperature greater than 38C or less than 36C, HR greater than 90, Respiratory rate greater than 20, WBC greater than 12,000 or less than 4,000 or greater than 10% bands.
 - B. Sepsis: SIRS + source of infection
 - C. Severe Sepsis: Sepsis + organ dysfunction
 - D. Septic Shock: Persistent hypotension and organ dysfunction despite aggressive fluid resuscitationIf sepsis is likely, a central venous catheter should be placed if it hasn't been done yet. Consider placing a ScvO₂ Triple Lumen catheter.

If sepsis is not present, alternative diagnosis should be sought.

4. If sepsis likely, begin aggressive fluid resuscitation. See Early Goal Directed Therapy algorithm.
5. Appropriate laboratory and radiographic studies should be obtained:
 - A. Blood cultures x2, lactate, ABG, CBC with differential, BMP, LFTs, amylase, lipase, cardiac enzymes, random cortisol, UA with culture, and sputum culture if possible.
 - a. EKG
 - b. CXR
 - c. CT scans if indicated
- 6a. Begin appropriate antibiotics based on presumed source of infection. See Antibiotic Selection Clinical Pathway.
- 6b. Give hydrocortisone 100 mg IV once if random cortisol has been drawn. If it has not been drawn, give 4 mg of Decadron.
7. Transfer to ICU.





Bibliography

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