

Sepsis & Septic Shock

Recognition, initial resuscitation, antimicrobial therapy and source control, hemodynamic and respiratory support, and supportive care for adults with sepsis or septic shock.

GRADE 1 • Strong For 2 • Conditional For 2- • Conditional Against 3 • Strong Against

1 Recognition & Initial Resuscitation

1

Screen acutely ill/high-risk patients with NEWS, NEWS2, MEWS, or SIRS – not qSOFA alone – within a sepsis performance-improvement/QI program.

1

Blood cultures as soon as possible, ideally before antimicrobials; measure lactate and use decrement (not normalization) to guide fluids.

2

≥30 mL/kg IV crystalloid over first 3h for hypoperfusion/septic shock. Weight-based (actual, or adjusted if BMI >30); reassess to avoid over-resuscitation.

GUIDING FURTHER RESUSCITATION

2

Use dynamic measures (passive leg raise, SVV, PPV) over exam/static parameters, with capillary refill as an adjunct. Admit to ICU within 6 hours if required.

2 Antimicrobial Therapy & Source Control

1

Timing – antimicrobials within 1 hour for septic shock or probable/definite sepsis without shock; within 3 hours for possible sepsis without shock if concern persists after a brief focused workup. Use clinical evaluation, not procalcitonin, to decide whether to start.

GRADE	EMPIRIC COVERAGE DECISION	NOTES
2	MDR pathogen coverage	Only with specific MDR risk factors; withhold if low risk
2-	Empiric antifungal therapy	Avoid unless invasive-candidiasis risk factors present
2	Anaerobic coverage	Only with specific risk factors (intra-abdominal, necrotizing STI, CNS source)
1	Beta-lactam dosing	Prolonged/continuous infusion for maintenance, after a loading dose

SOURCE CONTROL & DE-ESCALATION

2

Identify and achieve source control as soon as practical (ideally ≤6h). De-escalate once cultures/susceptibilities are available; favor shorter courses once source-controlled – use procalcitonin + clinical evaluation together if duration is unclear.

3 Hemodynamic Management

1

MAP target 65 mmHg (60–65 mmHg if age ≥65). Balanced crystalloids first-line fluid. Norepinephrine first-line vasopressor – may start peripherally rather than delaying for central access.

Norepinephrine → + Vasopressin (escalating doses) → + Epinephrine (MAP inadequate) → + Inotrope/dobutamine (cardiac dysfunction)

3

Avoid – starches for resuscitation; gelatin, levosimendan, terlipressin, and beta-blockers (conditional). Avoid routine sodium bicarbonate unless pH ≤7.2 with AKIN 2–3 AKI.

4 Respiratory Support

2

HFNC as initial therapy over conventional oxygen or NIV for acute hypoxemic respiratory failure; trial awake proning if not intubated.

GRADE	ARDS VENTILATION	TARGET
1	Tidal volume	6 mL/kg predicted body weight
1	Plateau pressure	Upper limit 30 cmH ₂ O
2	PEEP	Higher PEEP by table for moderate–severe ARDS, not incremental titration
2	Prone positioning	>12 h/day, moderate–severe ARDS
2	NMBA	Intermittent boluses, not continuous infusion
2	VV-ECMO	Severe ARDS refractory to conventional ventilation, experienced centers

5 Adjunctive & Supportive Care

2

IV corticosteroids for septic shock.

1

Restrictive transfusion strategy; insulin at glucose >180 mg/dL; pharmacologic VTE prophylaxis (LMWH preferred) unless contraindicated.

2

Enteral nutrition within 72h; active fluid removal after acute resuscitation phase; PPI stress-ulcer prophylaxis if GI-bleed risk factors.

3

Avoid – antipyretics for outcome benefit, IV vitamin C, IV immunoglobulin, blood-purification therapies, vitamin D, and probiotics.

6 Goals of Care & Transitions

2

Discuss goals of care and prognosis with patients/families early (within 72h); integrate palliative care principles as appropriate – consultation per clinician judgment, not routine for all.

2

Use a structured ICU-to-floor transition program with standardized handoff; pharmacist-based medication reconciliation; written/verbal discharge education on diagnosis, treatment, and expected sequelae.

Remember – Sepsis is a clinical diagnosis and a medical emergency: cultures + lactate before or with antimicrobials, started within 1h for shock; 30 mL/kg crystalloid over 3h; norepinephrine titrated to MAP 65 (60–65 if ≥65y); source control within 6h. Reassess fluid responsiveness dynamically – avoid both under- and over-resuscitation.