

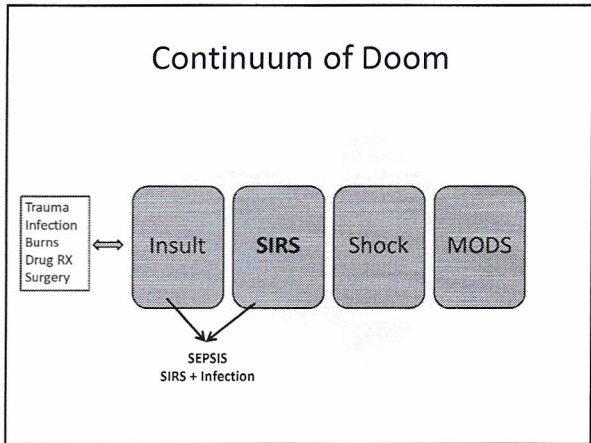
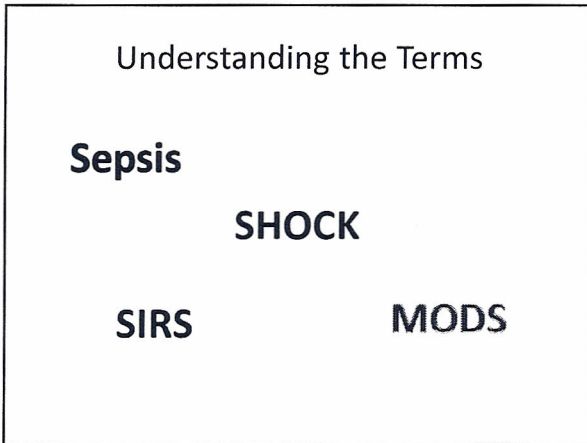
Shock/Sepsis/MODS

Strategies for Early Recognition

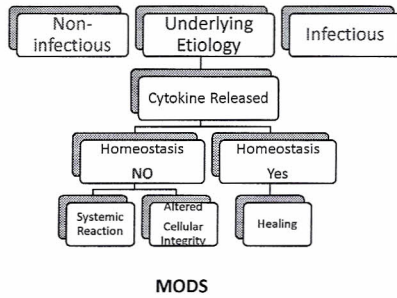
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Shock/Sepsis/MODS
Strategies for Early Recognition

- Shock/Sepsis/MODS?**
- Increasing incidence of sepsis
 - Sepsis common cause of death in ICU
 - Understanding shock/sepsis/mods facilitates early recognition/intervention
 - Shock is often factor in medical/nursing negligence



SIRS: Pathophysiology



Clinical Presentation

- SIRS Criteria
 - Temp >100
 - Hear rate > 90
 - RR >20
 - WBC > 12,000 or < 4000
- Systemic Impact
 - Hypoxemia/ARDS
 - Decreased Urinary Output
 - Hypotension
 - Hyperglycemia

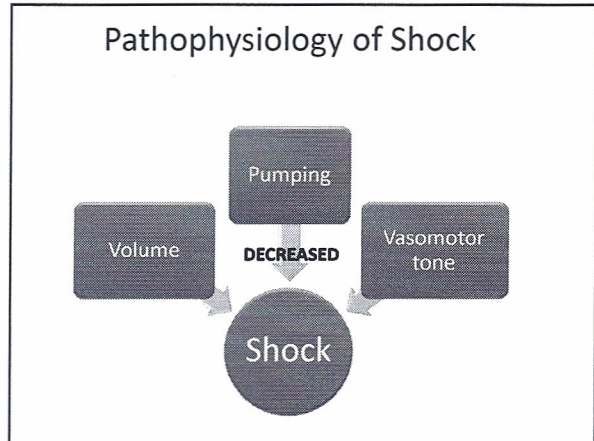
SIRS: Main Points

- Characterized by exaggerated inflammation/coagulopathy
- Not always related to infection
- “Equal Opportunist”
 - Age, sex, race
- Early recognition/intervention critical to patient outcome

SHOCK

Stages of Shock As reflected in the medical record...

Date/Time	Progress Note
2/2/0000	
[Early] 0800	Re-assessment performed, vss, no change in condition...
[Compensatory] 1420	Restless, states "can't get comfortable," BP 102/62, P92,R22, O2 sat 90-92% on 1L/NC O2. BG 192 (see MAR).
[Late] 1900	BP 90/48, P 102, R 24 even, non-labored, sleeping at longer intervals, arouses to touch...
2215	CODE BLUE called...



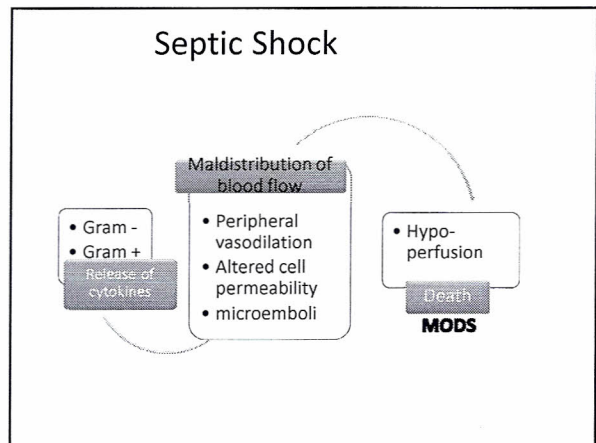
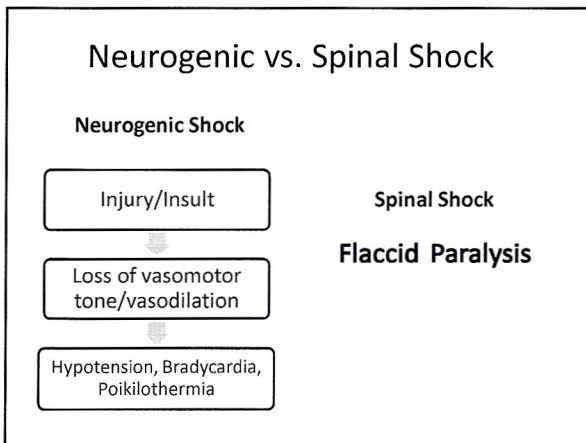
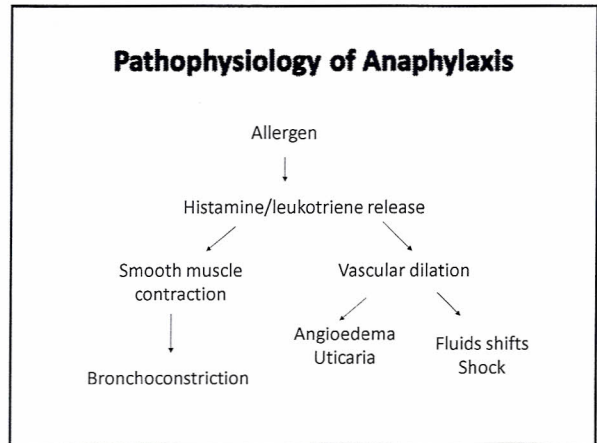
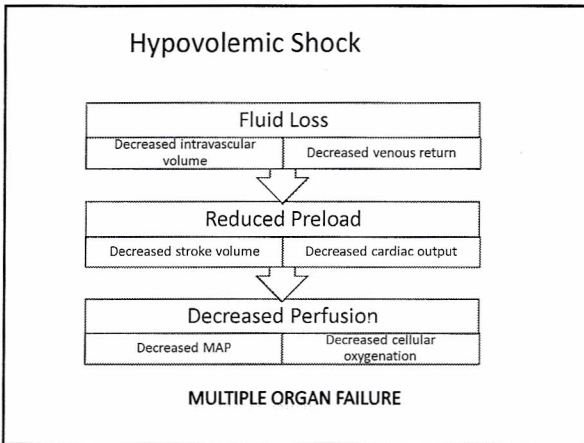
Shock: Types

- Cardiogenic
- Hypovolemic
- Distributive Shock
 - Anaphylactic
 - Septic
 - Neurogenic

↓BP, Temp

Thirst, cool clammy skin

Cardiogenic Shock



Septic Shock Clinical Picture					
	8	10	12	4	8
CV	120/78 88	110/70 82	100/70 90	100/50 100	88/62 100
RESP	14/96%	14/94%	16/90%	24/90%	24/90%
NEURO	A&O	A&O	"sleepy"	"drowsy"	"lethargic" A&O X 3
RENAL	1000/		1200/400	2000/500	
GI	BS +		BS +		BS -
INTEGU- MENTARY	WNL		WNL	Facial Flushing	Pale, cool

Labs: BG 170, WBC 3,800, BUN 22, CO2 49

Respiratory Distress/Failure Clinical Picture	
Hypoxemia Hypercapnia Respiratory Acidosis	Headache, irritability, confusion, lethargy, dysrhythmia, tachycardia, bradycardia, hypotension, decreased cardiac output, cyanosis.
Increased work of breathing	Dyspnea, exhaustion
Increased right- sided heart pressure	Peripheral edema, neck vein distention, Hepatomegaly

Multi Organ Dysfunction
Altered organ function as a result of the progression of SIRS/Sepsis/Shock

- May be first clinical signs of sepsis
- Can be primary or secondary
- Physiological insults are triggers
- Characterized by hypoperfusion
 - Symptoms of shock
 - Bleeding
 - Mental status changes
 - Decreased urinary output
 - Labs: hypoxia/hypoxemia, liver enzymes/creatinine, prolonged PT/PTT

Shock/MODS: Medical Management

Normal saline
Lactated Ringers

Albumin

Drug Therapy
Vasopressors
Sodium Bicarb
Antibiotics
Steroids
Insulin

Shock: Nursing Management

- Vital signs with O₂ Sat
- I&O (renal/cardiac perfusion)
- Neuro assessment [cerebral perfusion]
- Lung Assessment [pulmonary perfusion]
- Nutrition
 - Enteral/Parenteral
- Labs: *monitoring and interpretation
 - ABG, Electrolytes, PT/PTT, glucose, CBC

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QUESTIONS

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