Excerpts from the talk on

S H O C K

Definitions

- Shock is a clinical condition characterized by signs & symptoms which arise when the cardiac output is insufficient to fill the arterial tree with blood under sufficient pressure to provide organs and tissues with adequate blood flow (Simeone)
- Disordered response of organisms to an inappropriate balance of substrate supply and demand at a cellular level (Cerra)

Classification

A. Cardiogenic shock I

1.Primary myocardial dysfunction

A.Myocardial infarction

B.Cardiomyopathy

C.Valvular hear disease

D. Cardiac arrhythmias

E.Myocardial depression form other causes

(1) trauma (2) drug toxicity

Classification

Cardiogenic shock II

Extrinsic causes of impaired cardiac function

A. Tension pneumothorax

B. Vena caval obstruction

C. Cardiac tamponade

D. Pulmonary embolus

Classification

B. Hypovolemic shock I

1.Blood loss

a. Trauma

b.Gastrointestinal

c. Ruptured aneurysm

d. Spontaneous retroperitoneal hemorrhage

Classification

Hypovolemic Shock II

2. Plasma loss
    a. Burns
    b. Pancreatitis
    c. Peritonitis

Classification

Hypovolemic Shock III

3. Water loss
    a.Gastrointestinal
    b. Renal
4. Any combination of these three items

Classification

- **C. Neurogenic Shock.**

Brought about central failure of autonomic nervous system to maintain PVR.

1.Spinal anesthesia.

2. High spinal cord section.

3. Neurogenic reflexes,as in acute pain.

Classification

- **D. Vasogenic**

Resulting from decreased peripheral arterial resistance & increased central venous capacitance

1.Sepsis

a.Infectious b. Noninfectious c. Either of these assoc. with multiple organ failure

Classification

Vasogenic II

Resulting from decrease peripheral arterial resistance and increased central venous capacitance.

1. Sepsis
2. Anaphylaxis

Classification

An easier classification by etiology

1. **Hypovolemic shock**, based on dehydration, blood loss, burns.
2. **Distributive shock**, based on loss of vascular tone (anaphylactic, septic, toxic shock).
3. **Cardiogenic shock**, based on pump failure.