SAWA UNIVERSITY

جامعة ساوة الاهلية
كلية التقنيات الصحية والطبية
قسم التخدير - اللجنة العلمية

أسس العناية المركزة \الكورس الاول

ICU ADMISSION AND DISCHARGE LEC 2

جامعـــــــة ســـــــــاوة الاهلية — Sawa University

كليـــــة التقنيـــات الصحيـة والطبيـة — College of health and medical techniques

قسم تقنيـــات التخديـــــــر — Department of Anesthesia

.....المرحلـــــــــــــة ...الثالثة — .....third..... Stage

نظـــــــري — Theoretical

محاضرة رقم .....2.. — Lecture No. …2…..

استاذ المادة : .....د ضي عبد الكريم .....نوري

ICU ADMISSION AND TRIAGE CRITERIA

REQUESTS FOR ICU BEDS

- *excellent care*
- *abundant resources*
  - *high nurse-patient ratios*
  - *pharmacists,nutritionist, RT's, etc*
  - *high tech equipment*
- *signs of deterioration quickly identified*
- *"give them a chance"*
- *discomfort with death*
- *convenience*
- **Demand frequently exceeds supply**

THE "EXPENSIVE" CARE UNIT

Canada

- 8% of total inpatient cost
- 0.2 % of GNP
- $1500 per day

USA

- 20 - 28 % of total inpatient cost
- 0.8 to 1 % of the GNP

1 ICU day = 3 to 6 times non-ICU day

Higher costs in non-survivors

ICU resources are finite

ICU ADMISSION CRITERIA

- **A service for patients with *potentially recoverable* conditions who can *benefit* from more detailed observation and invasive treatment than can be safely provided in general wards or high dependency areas**

Prioritization Model

- **Priority 1**
  - critically ill, unstable
  - require intensive treatment and monitoring that cannot be provided elsewhere
  - ventilator support
  - continuous vasoactive infusions
  - mechanical circulatory support
  - no limits placed on therapy
  - high likelihood of benefit

Prioritization Model

- **Priority 2**
  - **Require intensive monitoring**
  - **May potentially need immediate intervention**
  - **No therapeutic limits**
  - **Chronic co-morbid conditions with acute severe illness**

Prioritization Model

- **Priority 3**
  - Critically ill
  - Reduced likelihood of recovery
  - Severe underlying disease
  - Severe acute illness
  - Limits to therapies may be set
    - no intubation, no CPR
  - Metastatic malignancy complicated by infection, tamponade, or airway obstruction

Prioritization Model

- **Priority 4**
  - **Generally not appropriate for ICU**
  - **May admit on individual basis if unusual circumstances**
  - **Too well for ICU**
    - **mild CHF, stable DKA, conscious drug overdose, peripheral vascular surgery**
  - **Too sick for ICU (terminal, irreversible)**
    - **irreversible brain damage, irreversible multisystem failure, metastatic cancer unresponsive to chemotherapy**

Diagnosis Model

- **Uses specific conditions or diseases to determine appropriateness of ICU admission**
- **48 diagnosis/ 8 organ systems**
  - **Acute MI with complications**
  - **cardiogenic shock**
  - **complex arrhythmias**
  - **acute respiratory failure**
  - **status epilepticus, SAH**

Objectives Parameters Model

- **Vital signs**
  - **HR < 40 or > 150**
  - **SBP <80**
  - **MAP <60**
  - **DBP >120**
  - **RR > 35**

Objectives Parameters Model

- **Laboratory values**
  - **Sodium < 110 or > 170**
  - **Potassium <2.0 or > 7.0**
  - **PaO2 < 50**
  - **pH < 7.1 or > 7.7**
  - **Glucose > 800 mg/dL**
  - **Calcium > 15 mg/dL**
  - **toxic drug level with compromise**

Objectives Parameters Model

- **Radiologic**
  - **ICH, SAH, contusion with AMS or focal neuro signs**
  - **Ruptured viscera, bladder, liver, uterus with hemodynamic instability**
  - **Dissecting aorta**

Objectives Parameters Model

- **EKG**
  - **acute MI with complex arrhythmias, hemodynamic instability, or CHF**
  - **sustained VT or VF**
  - **complete heart block with instability**

Objectives Parameters Model

Physical findings (acute onset)

- unequal pupils with LOC
- burns > 10%BSA
- anuria
- airway obstruction
- coma
- continuous seizures
- cyanosis
- cardiac tamponade

Discharge Criteria

- **physiologic status has stabilized**
  - **need for ICU monitoring and care no longer necessary**
- **physiologic status has deteriorated**
  - **active interventions no longer planned**

Intermediate Care Units

- monitoring and care of patients with moderate or potentially severe physiologic instability
- require technical support
- frequent monitoring of vital signs
- frequent nursing interventions
- not necessarily artificial life support
- do not require invasive monitoring
- require less care than ICU
- require more care than general ward

Intermediate Care Units

- **reduces costs**
- **reduces ICU LOS**
- **no negative impact on outcome**
- **improves patient/family satisfaction**

ICU Triage

- **good prognosis over poor**
- **likelihood of benefit**
- **life expectancy due to disease**
- **anticipated quality of life**
- **wishes of patient or surrogate**
- **obligations to current patients outweigh new patients**

ICU Triage

- **“Too well to benefit”**

- **“Too sick to benefit”**

Any questions?

QUIZ

YOU WILL BE EXAMED AFTER THE LECTURE