

إن شاء الله ما نسيت شي، الله يوفقنا و يفتح علينا قولوا آمين

Cardiology :

NYHA classification:

- Class I: No limitation of physical activity (vigorous exercise)
- Class II: Slight limitation of physical activity in which ordinary physical activity leads to fatigue, palpitation, dyspnea, or anginal pain; the person is comfortable at rest (climbing the stairs)
- Class III: Marked limitation of physical activity in which less-than-ordinary activity results in fatigue, palpitation, dyspnea, or anginal pain; the person is comfortable at rest (walking across the room)
- Class IV: Inability to carry on any physical activity without discomfort but also symptoms of heart failure or the anginal syndrome even at rest, with increased discomfort if any physical activity is undertaken (symptoms at rest)

European society of heart failure guidelines:

Essential features:

- Symptoms and signs of HF
- Objective evidence of cardiac dysfunction (at rest, echo)

Nonessential features:

- Response to treatment (in cases where the diagnosis is in doubt)

Framingham Criteria for diagnosing heart failure:

Major

- Cardiomegaly
- JVD
- Rales
- S3 gallop
- PND
- Acute pulmonary edema
- + hepatojugular reflex
- Venous pressure > 16cm H2O

Minor

- Night cough
- Lower limb edema
- Dyspnea on exertion
- Hepatomegaly
- Pleural effusions
- Tachycardia

American Heart Association heart failure classification (structural):

Stage A:

Patients at risk for heart failure who have not yet developed structural heart changes (i.e. those with diabetes, those with coronary disease without prior infarct)

Stage B:

Patients with structural heart disease (i.e. reduced ejection fraction, left ventricular hypertrophy, chamber enlargement) who have not yet developed symptoms of heart failure

Stage C:

Patients who have developed clinical heart failure

Stage D:

Patients with refractory heart failure requiring advanced intervention (i.e. biventricular pacemakers, left ventricular assist device, transplantation)

Cha2Ds2 for assessing the risk of stroke in AFib IMPORTANT

• THE CHA2DS2-AS2 SCORE IS MORE ACCURATE THAN CHADS2

	Weight (Points)
Congestive Heart failure or left ventricular ejection fraction equals or less than 35% (LVEF)	1
Hypertension	1
Age >75 years	2
Diabetes mellitus	1
Stroke /TIA/ Systemic embolism	2
Vascular disease (MI/PAD/Aortic plaque)	1
Age 65-74 years	1
Sex category	1
Moderate-High risk	≥ 2
Low risk	0-1

Duke Criteria for infective endocarditis: **IMPORTANT**

Major Criteria

- Sustained bacteremia by an organism known to cause endocarditis
- Endocardial involvement (by echo or a new regurgitation murmur)

Minor Criteria

- Predisposing condition
- Fever
- Vascular phenomena (septic emboli, mycotic aneurysm, Janeway lesions, intracranial hemorrhage)
- Immune phenomena (glomerulonephritis, Osler's nodes, rheumatoid factor, Roth spots)
- Positive blood cultures (not meeting major criterion)
- Positive echocardiogram (not meeting major criterion)

Interpretation: 2 major, 1 major + 3 minor or 5 major for definitive diagnosis

Modified Jones Criteria:

Respiratory :

CURB65 Pneumonia **IMPORTANT**

Confusion

Uremia (>7)

Respiratory rate >30

Blood pressure (<90 systolic or <60 diastolic)

65+

Interpretation: 0-1 outpatient, 2-3 inpatient, 3+ ICU

Assessing severity of pneumonia (ICU or not?)

Major Criteria

- Invasive ventilation
- Septic shock on pressors

Minor Criteria

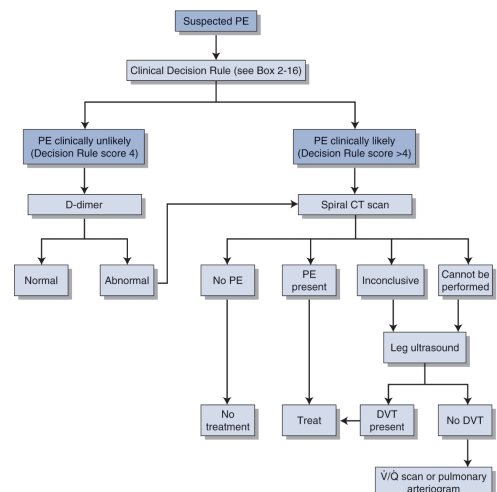
- RR > 30
- Multilobular infiltrates
- Confusion
- BUN > 20
- Temperature < 36
- WBCs < 400
- Platelets < 100k
- Hypotension requiring aggressive fluids
- PaO₂/FiO₂ < 250

Interpretation: 1 major or 3 minor = take them to the ICU

Modified Wells Criteria for suspected acute pulmonary embolism:

Criteria	Points
Symptoms and signs of DVT	3
Alternative diagnosis less likely than PE	3
Heart rate > 100	1.5
Immobilization (>3 days) or surgery in the past 4 weeks	1.5
Previous DVT or PE	1.5
Malignancy (even in the past 6 months)	1
Hemoptysis	1

look at the diagram for interpretation



Light's criteria for pleural effusions **IMPORTANT**

:(Exudative effusions have at least one of the following (transudates have none)

- Protein (pleural)/protein (serum) >0.5
- LDH (pleural)/LDH (serum) >0.6
- LDH > two-thirds the upper limit of normal serum LDH

Nephrology

RIFLE Criteria for Acute Kidney Injury

	GFR/Creatinine criteria	Urine Output criteria
Risk	Increase in creatinine x1.5 Or GFR decrease >25%	< 0.5 ml/kg/hr for 6 hrs
Injury	Increase in creatinine x 2 Or GFR decrease >50%	< 0.5 ml/kg/hr for 12 hrs
Failure	Increase in creatinine x 3 Or GFR decrease >75%	< 0.3 ml/kg/hr for 24 hrs or Anuria for 12 hrs
Loss	Persistent ARF = Complete loss of renal function > 4 weeks	
ESRD	End Stage Renal Disease > 3 months	

Diagnostic Criteria for SIADH

Essential criteria

- Effective serum osmolality <275 mOsm/kg
- Urine osmolality >100 mOsm/kg
- Clinical euvoemia
- Urine sodium concentration >30 mmol/l with normal dietary salt and water intake
- Absence of adrenal, thyroid, pituitary or renal insufficiency
- No recent use of diuretic agents

Supplemental criteria

- Serum uric acid <0.24 mmol/l (<4 mg/dl)
- Serum urea <3.6 mmol/l (<21.6 mg/dl)
- Failure to correct hyponatremia after 0.9% saline infusion
- Fractional sodium excretion >0.5%
- Fractional urea excretion >55%

Gastrointestinal and hepatobiliary

Child Pugh score for assessing severity of cirrhosis

POINTS	1	2	3
Ascites	Absent	Slight	Moderate
Bilirubin	<2.0 mg/dL (<34.2 micromol/L)	2.0-3.0 mg/dL (34.2-51.3 micromol/L)	>3.0 mg/dL (>51.3 micromol/L)
Encephalopathy	None	Grade 1 to 2	Grade 3 to 4
PT (seconds over control) or INR ratio	<4	4 to 6	>6
	<1.7	1.7-2.3	>2.3
Albumin	>3.5 g/dL (>35 g/L)	2.8-3.5 g/dL (28-35 g/L)	<2.8 g/dL (<28 g/L)

Interpretation:

- Class A 5 to 6 points total (least severe liver disease), 100-85% 2-year survival
- Class B— 7 to 9 points total (moderate severe liver disease), 80-60% 2-year survival
- Class C— 10 to 15 points total (severe liver disease), 45-35% 2-year survival

MELD score (model for end-stage liver disease)

$(3.8 \times \text{serum bilirubin}) + (11.2 \times \text{INR}) + (9.6 \times \text{creatinine}) + 6.4$

Rome III Criteria for IBS



22.83 Rome III criteria for diagnosis of irritable bowel syndrome

Recurrent abdominal pain or discomfort at least 3 days/mth in the last 3 months, associated with *two or more* of the following:

- Improvement with defecation
- Onset associated with a change in frequency of stool
- Onset associated with a change in form (appearance) of stool