TABLE 1: CARDIAC RISK FACTORS [2]

1. Ischemic heart disease
   - angina, previous myocardial infarction, congestive heart failure (CHF)
2. Diabetes
3. Renal insufficiency (SCr > 2 mg/dL)
4. Poor cardiopulmonary functional status
5. High risk surgery*

* High risk surgery is defined as thoracic, intraperitoneal or suprainguinal vascular surgery.

SCr = serum creatinine

TABLE 2: PREOPERATIVE EVALUATION OF CARDIAC ISCHEMIA [3]

1. History and physical
2. Resting ECG
3. Exercise electrocardiography
4. Radionuclide stress testing*
5. Dobutamine stress echocardiography*
6. Cardiac catheterization

* Non-invasive tests indicated when exercise electrocardiography provides inadequate information (for details, see text)

TABLE 3: THE CLINICAL SPECTRUM OF AIRWAY OBSTRUCTION

1. Extrinsic, allergic asthma
   - childhood onset
   - well-defined allergies
   - responds to prophylaxis with cromolyn
   - responds to bronchodilators, steroids
2. Intrinsic asthma
   - adult onset
   - poorly defined allergies
   - cromolyn ineffective
   - responds to bronchodilators, steroids
3. COPD with superadded acute airway obstruction
   - elderly onset
   - resistant to cromolyn
   - responds poorly to bronchodilators
   - may respond to steroid prophylaxis or therapy

TABLE 4: PULMONARY FUNCTION TESTS

Test	Abbrv.	Normal	Explanation	Severe Emphysema
Total lung capacity	TLC	5-6 L	Distinguishes between restrictive (decreased TLC) and obstructive (increased TLC) lung disease	7-8 L (>120% of pred.)
Residual volume	RV	33% of TLC	Increased in emphysema	≥ 50% of TLC
Forced vital capacity	FVC	4-5 L	Indicates pulmonary reserve	3.5 L (<75% of pred.)
Forced expiratory volume in 1 sec	FEV_1	75% of FVC	Large airway flow (effort dependent)	1.75 L (<50% of FVC)
Forced expiratory flow (25%-75%)	$FEF_{25-75\%}$	3-5 L/sec	Small airway flow (effort independent)	0.9 L/sec (<20% of pred.)
Maximal voluntary ventilation	MVV	70-100 L/min	Measure of endurance or fatigue	< 35 L/min (< 50% of pred.)
Diffusion capacity for CO	DL_{CO}	80-10%	Represents functional lung area	< 30%

Useful pulmonary function tests and their normal values are shown. In the last column, values representative of a patient with severe emphysema are listed for comparison.

Abbrv. = abbreviation, pred. = predicted

TABLE 5: PERIOPERATIVE ACIDOSIS IN RENAL FAILURE

The patient is a 35-yr old diabetic undergoing cadaveric renal transplant, who has delayed graft function in the early postoperative period.

Time	$PaCO_2$	pH	AB	K
Preoperative	32	7.32	17	5.0
Intraoperative	40	7.25	18	5.3
Postoperative (early)	44	7.21	19	5.6
Postoperative (later)	48	7.18	19	5.9

The preoperative arterial blood gas reveals chronic, partially compensated metabolic acidosis with serum potassium at the upper limit of normal. In the operating room the patient is provided with standard minute ventilation during general anesthesia and the $PaCO_2$ increases to normal with a decrease in pH and increase in potassium. In the recovery room, the patient's trachea is extubated and he develops a mild degree of hypercarbia, with a further decrease in pH and increase in potassium. A little later, hypercarbia has increased to moderate levels but because of the absence of buffer base, the pH decreases to less than 7.2 and the potassium increases to dangerous levels.

AB = actual bicarbonate, K = serum potassium.

TABLE 5: GRADING OF HEPATIC ENCEPHALOPATHY

Level 1	Confabulation, apraxia
Level 2	Confusion, asterexis
Level 3	Stupor
Level 4	Coma

TABLE 7: LIVER DISEASE: PREDICTORS OF POOR OUTCOME [11]

- Acute viral or alcoholic hepatitis
- Chronic active hepatitis with jaundice, symptoms
- Cirrhosis (Child's C)
- Ileostomy, colostomy
- Cholecystectomy
- PT > 3 sec prolonged despite Vitamin K
- Emergent surgery

Child's C – see Table 8. PT = prothrombin time

TABLE 8: CHILD-TURCOTTE-PUGH CLASSIFICATION [11, 12, 14]

Child's Grade	A	B	C
Bilirubin (mg/dL)	< 2	2 - 3	> 3
Albumin (g/dL)	> 3.5	3 - 3.5	< 3
PT (sec > control)	1 - 4	4 - 6	> 6
Coma score (see Table 6)	0	1 - 2	3 - 4
Ascites (management)	none	easy	difficult
Nutritional status	excellent	good	poor
Operative mortality [12]	0-10%	4-31%	19-76%