Preoperative Risk Stratification and Patient Optimization for Elective surgeries

Preoperative evaluation

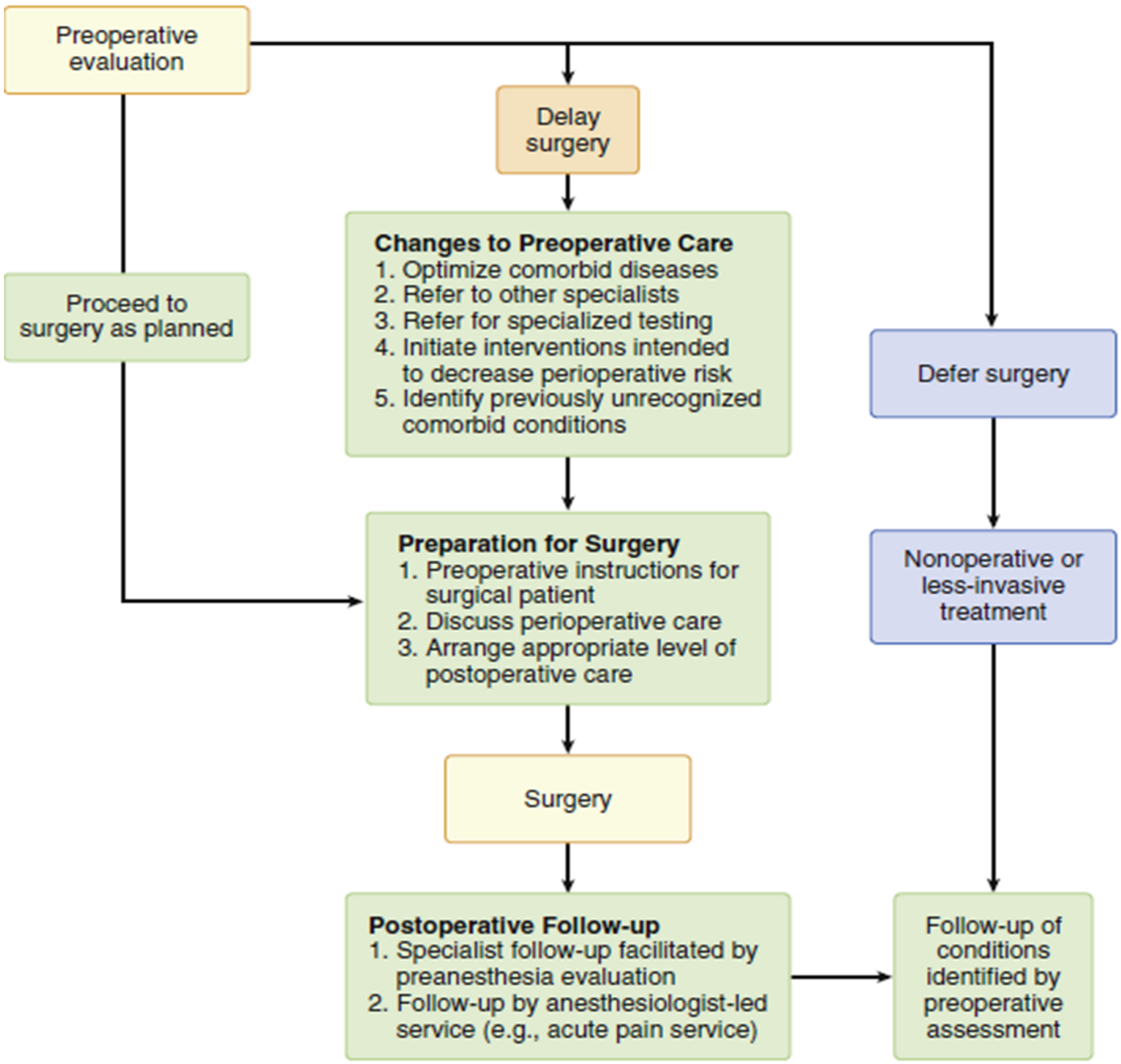
- Surgical procedures performed under anaesthesia require preoperative evaluation
  - Anaesthesia is an added risk to surgery
  - Preanaesthetic evaluation of patients improve clinical safety
  - Minimizes morbidity in appropriately prepared patient

Purpose

- To obtain pertinent information regarding.
  - The patient's medical history,
  - Formulate an assessment of the patient's perioperative risk
  - Develop a plan for any requisite clinical optimization.
  - Planning postoperative pain management in the background of preoperative pain medication

Goals of Preoperative evaluation

- To ensure that patients can safely tolerate anaesthesia for planned surgical procedures
- To mitigate risks associated with the overall perioperative period



Scope of Preoperative Evaluation

- General History (leading question based)
- Physical examination
- Evaluation of coexisting disease
- Preop lab and diagnostic investigations
- Preop medication management

History

❖*Correct diagnosis can be made in 56% of cases on the basis of history alone*

- History in general
- History of coexisting medical illnesses
- History of taking medicine
- History of allergies and drug reactions
- Anaesthetic history
- Family History

Physical examination

- Special attention to the evaluation of the
  - vital signs, (CNS, heart, lung,)
  - Airway,
  - If regional anaesthesia is proposed :
    - Assessment of the site of block
    - Back

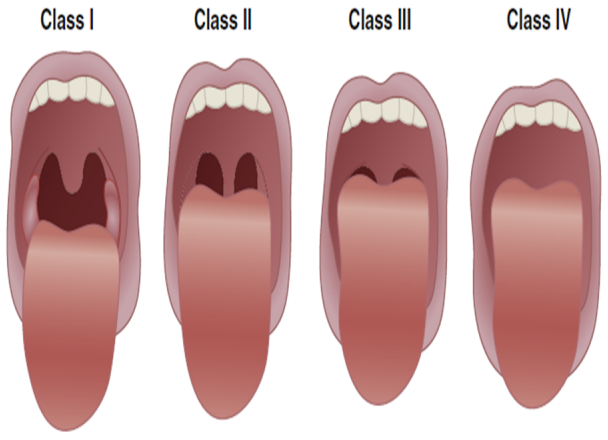
Height and weight

- Calculate BMI : obese
- Estimate drug dosages
- Determine fluid volume requirement
- Calculate acceptable blood loss
- Adequacy of urine output

Vital signs

- Blood pressure
- Resting pulse
  - rate, rhythm, and fullness
- Respiration
  - rate, depth, and pattern at rest
- Body temperature
- Pain score (baseline score)

Airway Examination



- Mallampati classification
- Interincisors gap
- Thyromental distance
- Forward movement of mandible
- Range of cervical spine motion : flexion and extension
- Document loose or chipped teeth, tracheal deviation

Preoperative Evaluation Of Patients With Coexisting Disease

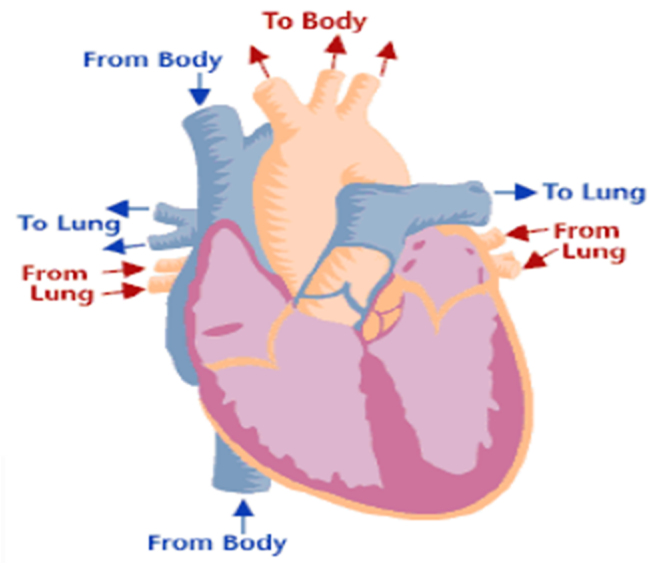
- Identification of these comorbid conditions often presents an opportunity for the anaesthesiologist to intervene to decrease risk

- These conditions are best managed before the surgery, thus allowing ample time for thoughtful evaluation, consultation, and optimization.

Cardiovascular system

- May lead to serious perioperative adverse events
- Cardiovascular complications account for almost half of the perioperative mortalities
- Serious myocardial injury occurs in approximately 80% of patients who undergo major surgery
- Some perioperative interventions modify risks for cardiovascular morbidity and mortality

Cardiovascular disorders



- Hypertension
- Ischemic heart disease
- Heart failure
- Valvular heart disease
- Patients with rhythm disturbances
- Patient with coronary stents
- Patients with pacemakers and ICD devices
- Patients with peripheral arterial disease

The Revised Cardiac Risk Index (RCRI) has been extensively validated for predicting perioperative cardiac risk in noncardiac surgery

TABLE 38-3 REVISED CARDIAC RISK INDEX COMPONENTS AND EXPECTED CARDIAC RISK

Components of Revised Cardiac Risk Index*	Points Assigned
High-risk surgery (intraperitoneal, intrathoracic, or suprainguinal vascular procedure)	1
Ischemic heart disease (by any diagnostic criteria)	1
History of congestive heart failure	1
History of cerebrovascular disease	1
Diabetes mellitus requiring insulin	1
Creatinine >2.0 mg/dL (176 μmol/L)	1
Revised Cardiac Risk Index Score	Risk of Major Cardiac Events†‡
0	0.4%
1	1.0%
2	2.4%
≥3	5.4%

METS

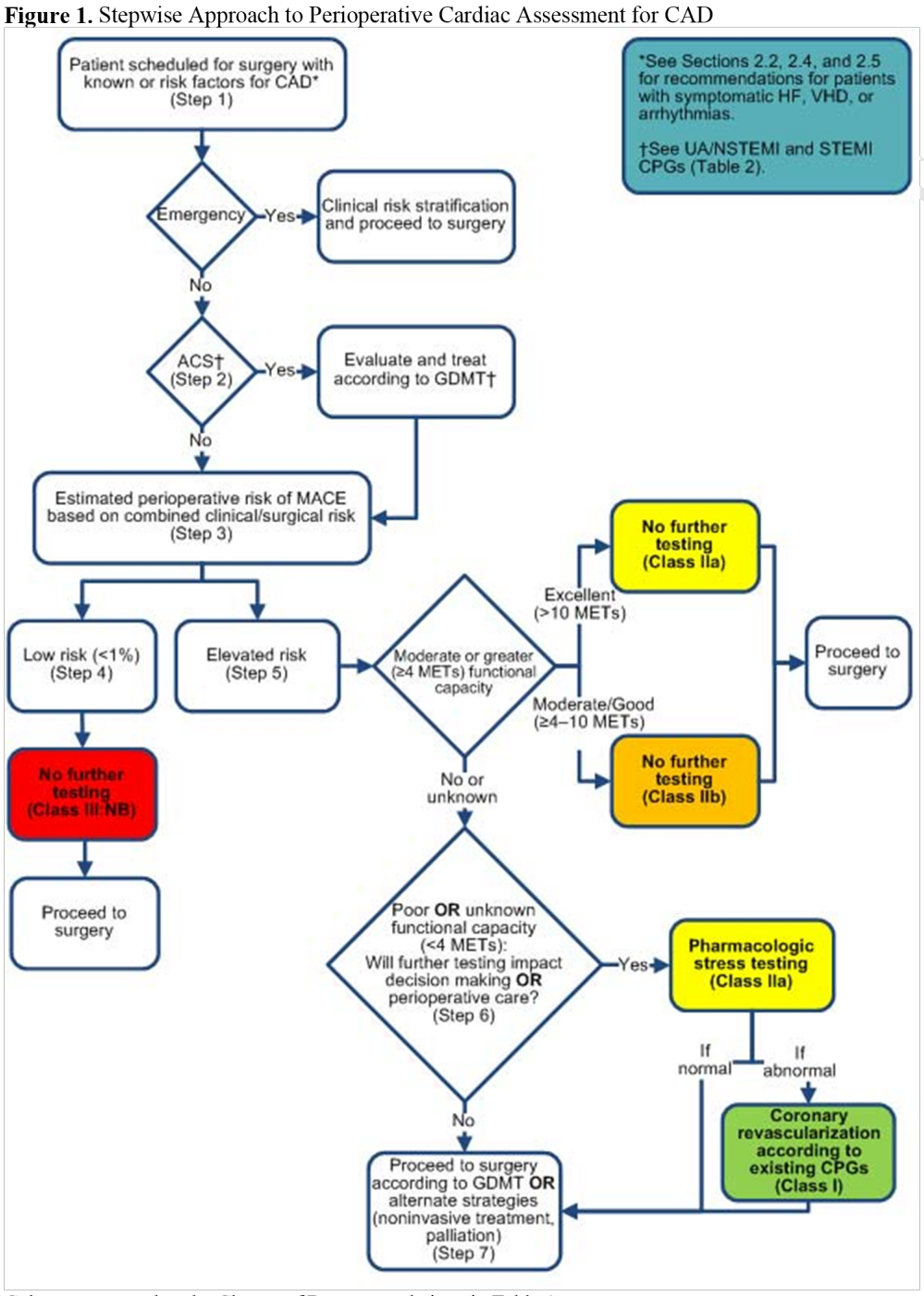
TABLE 38-1 METABOLIC EQUIVALENTS OF FUNCTIONAL CAPACITY

METs	Equivalent Level of Exercise
1	Eating, working at computer, or dressing
2	Walking down stairs, walking in your house, or cooking
3	Walking one or two blocks on level ground
4	Raking leaves or gardening
5	Climbing one flight of stairs, dancing, or bicycling
6	Playing golf or carrying clubs
7	Playing singles tennis
8	Rapidly climbing stairs or slowly jogging
9	Jumping rope slowly or cycling moderately
10	Swimming quickly, running, or jogging briskly
11	Skiing cross country or playing full court basketball
12	Running rapidly for moderate to long distances

Modified from Jette M, Sidney K, Blumchen G: Metabolic equivalents (METS) in exercise testing, exercise prescription, and evaluation of functional capacity, Clin Cardiol *13:555-565, 1990.*

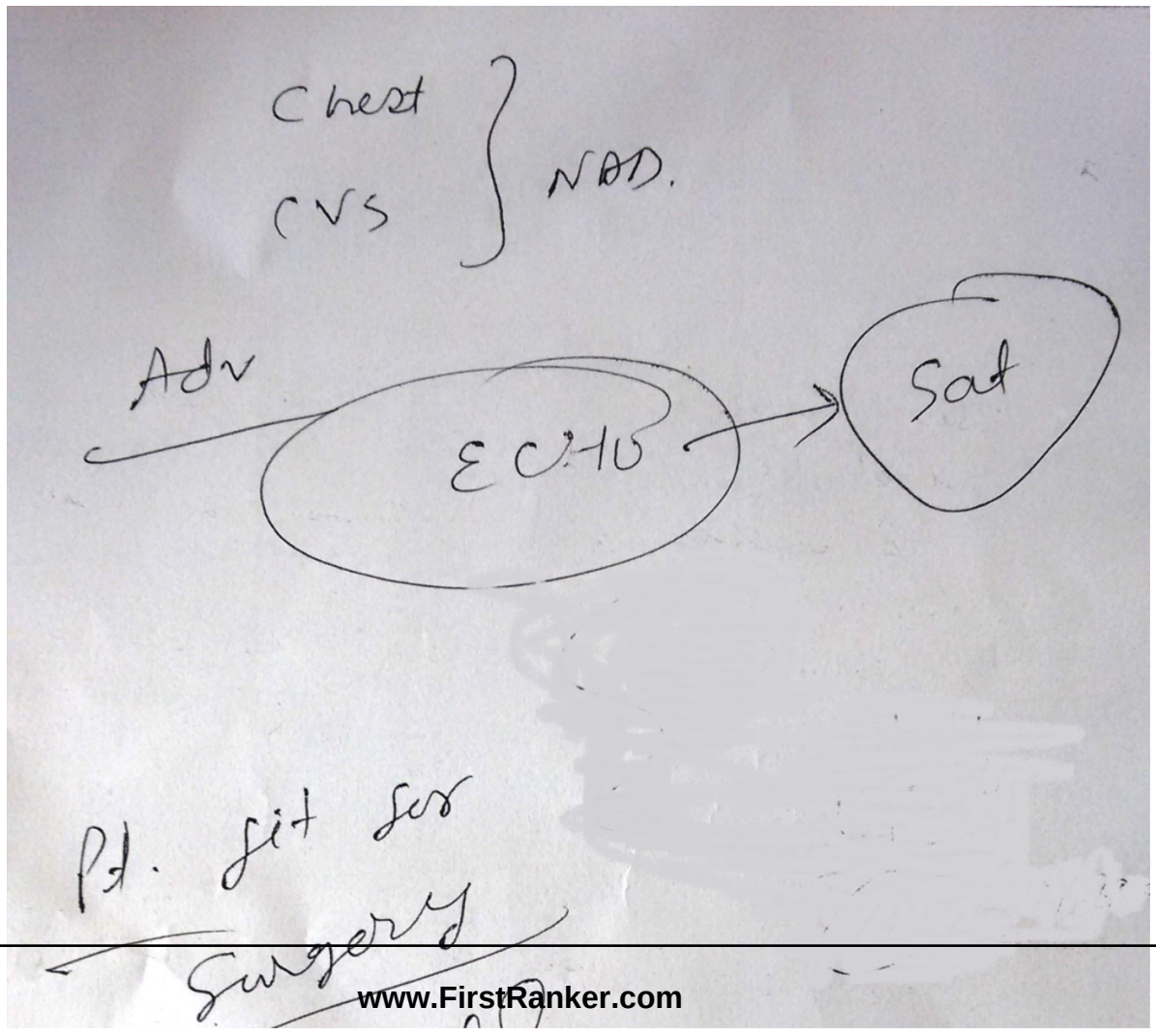
MET, Metabolic equivalent (1 MET is equivalent to oxygen consumption of 3.5 mL/minute/kg body weight).

Figure 1. Stepwise Approach to Perioperative Cardiac Assessment for CAD



Colors correspond to the Classes of Recommendations in Table 1.

Fliesher et al. "2014 ACC/AHA Guideline on Perioperative Cardiovascular Evaluationand Management of Patients Undergoing Noncardiac Surgery." http://content/onlinejacc.org/

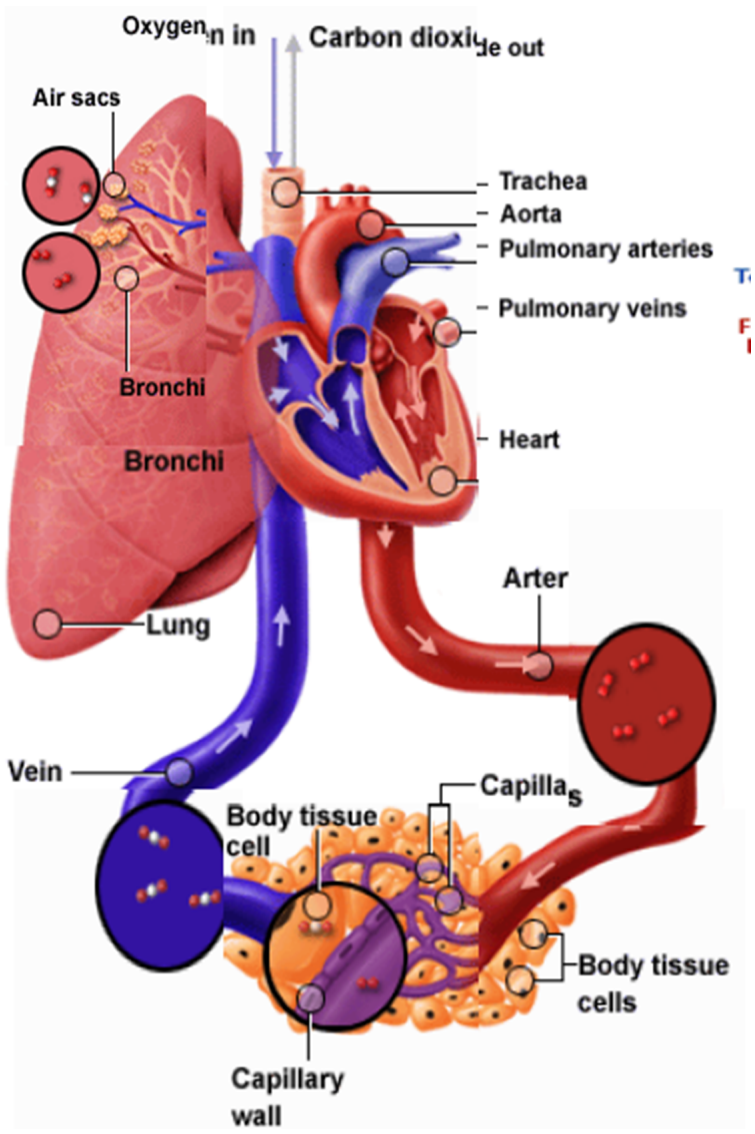


Respiratory system

- Respiratory function is inextricably linked to practice of anaesthesia
- GA has significant effects on respiratory function and lung physiology and mechanics
- Adverse respiratory event can occur during anaesthesia and the most significant is hypoxemia
- Integrative measures of respiratory function are likely predictors of outcome following anaesthesia and surgery

Pulmonary disorder

- Upper respiratory tract infection
- Asthma and COPD
- Chronic smokers
- Restrictive lung diseases
- Obstructive sleep apnoea
- Patients scheduled for lung resection



Endocrine system

- Diabetes Mellitus
- Thyroid disorders
- Hypothalamic- pituitary- adrenal disorders
- Pheochromocytoma

Renal system

- Surgical stress, anaesthetic agents tend to decrease GFR
- Renal impairment- CKD
  - AKI
- Contrast induced nephropathy

- The emphases of the preoperative evaluation of patients with renal insufficiency are on the cardiovascular system, cerebrovascular system, fluid volume, and electrolyte status

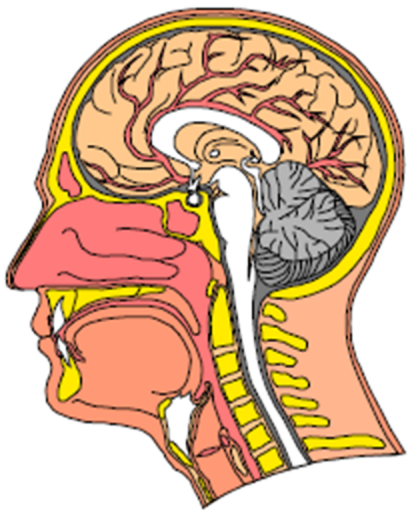
Hepatic disorder

- Liver diseases have significant impact on drug metabolism and pharmacokinetics
- Sedatives./opioids might have exaggerated effects in patients with advanced liver disease
- Hepatitis
- Alcohol liver disease
- Obstructive jaundice
- Cirrhosis

Hematologic Disorders

- Anaemia
- Sickle cell disease
- G6PD deficiency
- Coagulopathies

Neurologic disease



- Cerebrovascular disease
- Seizure disorders
- Multiple sclerosis
- Aneurysm and AV malformation
- Parkinson disease
- Neuromuscular junction disorders
- Muscular dystrophy and myopathy

Musculoskeletal and Connective tissue disorders

- Rheumatoid Arthritis
- Ankylosing Spondylitis
- Systemic Lupus Erythematosus
- Raynaud Phenomenon

Miscellaneous conditions

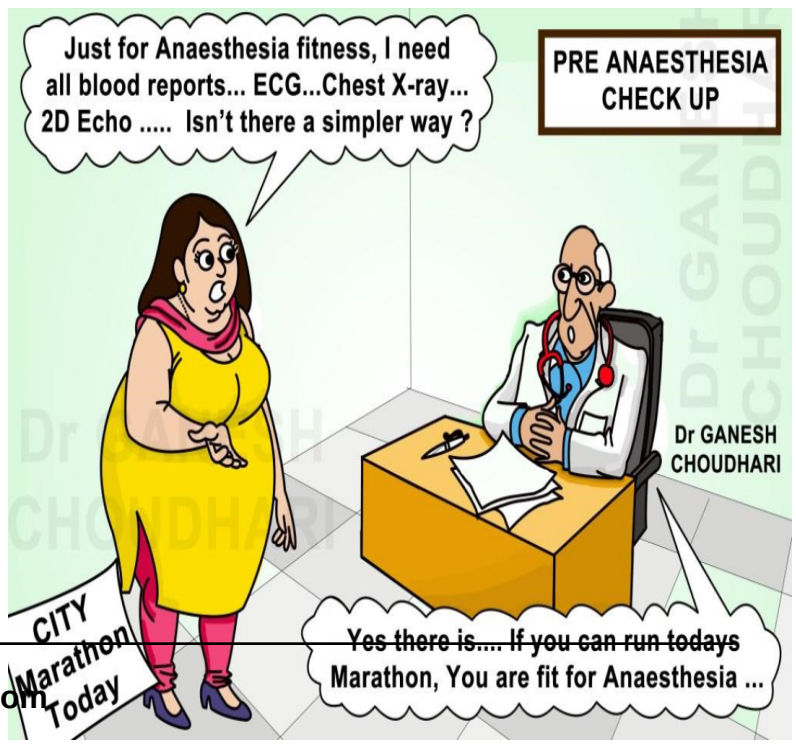
- Morbidly obese patient
- Patient with transplanted organs
- Patient with allergies
- Patient with substance abuse

Specific group of patient

- Children
- Pregnant patient
- Breast feeding patient
- Elderly patient

Preoperative laboratory and diagnostic studies

- To screen the disease
- To evaluate fitness for surgery
- Should be based on patient's medical history and proposed surgical procedure



Preoperative diagnosis based investigations before elective surgery

Complete blood count	Serum creatinine and electrolytes	Blood glucose	ECG	X-ray chest	Coagulation studies
Major surgery	Kidney disease,	Diabetes	Cardiac disease	Chronic lung	Liver disease
Neonates	Hypertension	Family H/o diabetes	Hypertension	disease	Renal dysfunction
Males > 70 years	Diabetes	Obese	Chronic lung	Heavy smoker	Family H/o Bleeding disorder
Females >45 years	Poor nutritional states	Stroke	disease	Radiation therapy	On anticoagulant drugs
Chronic renal, liver, lung	Stroke	Poor nutritional states	Diabetes	Aortic aneurysm	
disease	Medication	Steroids use	Thyroid disease	Cardiomegaly	
Anemia	- Digoxin	Cushing's, Addison's	Morbid obesity		
Malignancy	- Diuretics		Digoxin therapy		
Poor nutritional states	- Steroids		Males > 45 years		
Vascular aneurysms	- Chemo-therapy		Females >55 years		

Preoperative risk assessment

- A critical objective for the preanaesthesia evaluation
- Improves patients' understanding of the risks inherent to the perioperative period
- Helps health care providers for clinical decision making
- Helps to identify individuals who warrant potentially beneficial interventions, enhanced levels of postoperative monitoring, or consideration for alternative nonoperative treatment for their underlying condition

Risk stratification

- Meyer Saklad et al- 1941, described ‘six degree’ ASA PS grading of a patient’s physical state as just one of the components of the operative risk
- He listed the other components as:

  -The planned surgical procedure

  -The ability and skill of the surgeon in the particular procedure contemplated

  - The attention to postoperative care

  - The past experience of the anaesthetist in similar circumstances

Influences of various components on poor perioperative outcome

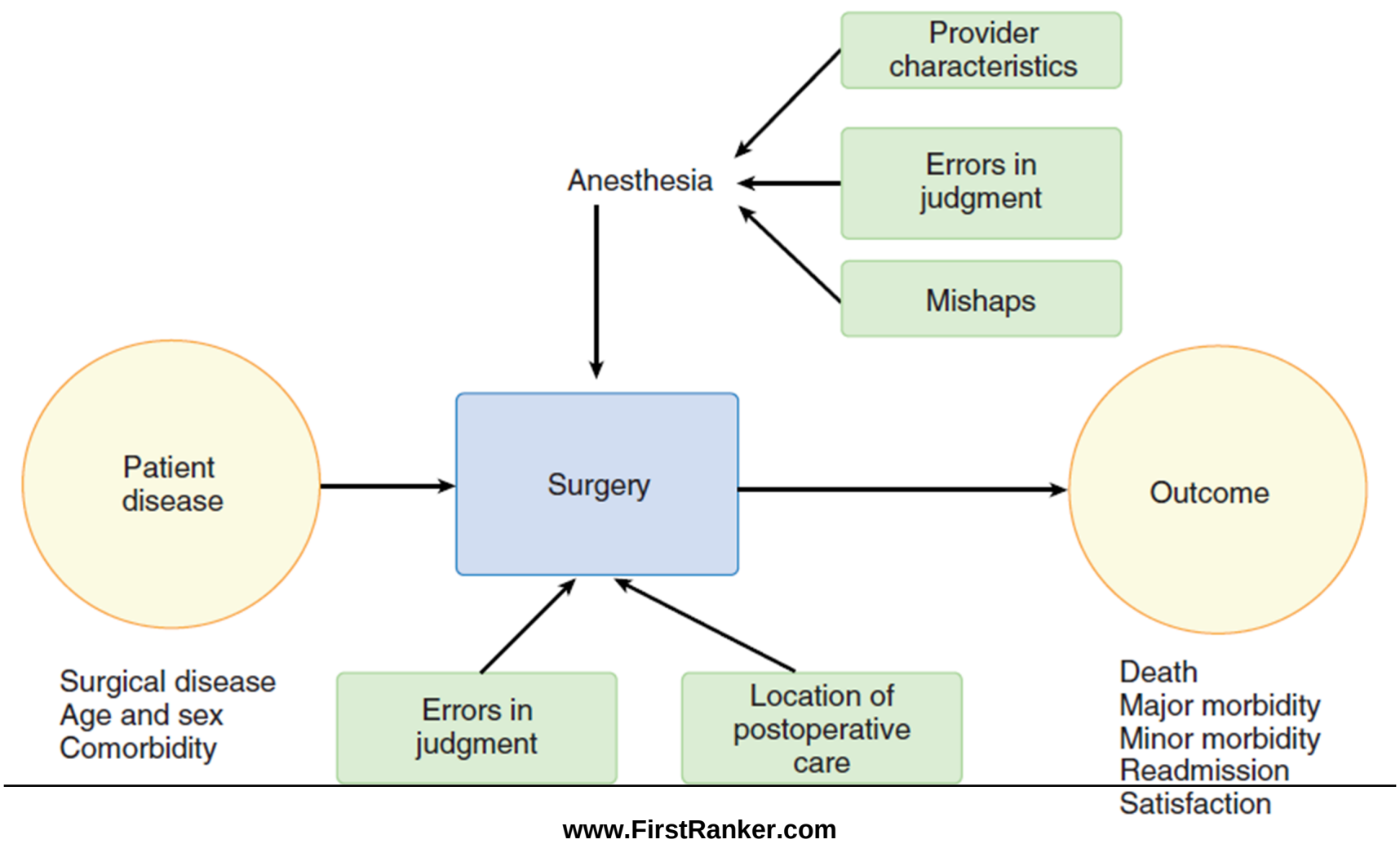


FIGURE 1 Evolution of the ASA PS classification

ASA PS classification version 1 (1941)
Each class was supported by several examples of patients who would fall into that category.

Class 1	no systemic disturbance
Class 2	moderate and definite systemic disturbance either pre-existing or caused by the condition that is to be treated by surgical intervention
Class 3	severe systemic disturbance
Class 4	extreme systemic disorders [that are] an eminent threat to life regardless of the type of treatment.
Class 5	emergency surgery in patients that would otherwise be graded as class 1 or 2
Class 6	emergency surgery in patients that would otherwise be graded as class 3 or 4

Class 7 was added at a later date – a moribund patient not expected to survive 24 hours with or without an operation

ASA PS classification version 2 (1962, amended 1980)

ASA PS 1	normal healthy patients
ASA PS 2	patients with mild systemic disease
ASA PS 3	patients with severe systemic disease
ASA PS 4	patients with severe systemic disease that is a constant threat to life
ASA PS 5	moribund patients who are not expected to survive without the operation
ASA PS 6	a declared brain-dead patient whose organs are being removed for donor purposes
E	prefix (later suffix) for patients undergoing emergency procedures

ASA PHYSICAL STATUS CLASSIFICATION SYSTEM

Last approved by the ASA House of Delegates on October 15, 2014

Table 1: Current definitions (NO CHANGE) and Examples (NEW)

ASA PS Classification	Definition	Examples, including, but not limited to:
ASA I	A normal healthy patient	Healthy, non-smoking, no or minimal alcohol use
ASA II	A patient with mild systemic disease	Mild diseases only without substantive functional limitations. Examples include (but not limited to): current smoker, social alcohol drinker, pregnancy, obesity (30<BMI<40), well-controlled DM/HTN, mild lung disease
ASA III	A patient with severe systemic disease	Substantive functional limitations; One or more moderate to severe diseases. Examples include (but not limited to): poorly controlled DM or HTN, COPD, morbid obesity (BMI ≥40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, premature infant PCA < 60 weeks, history (>3 months) of MI, CVA, TIA, or CAD/stents.
ASA IV	A patient with severe systemic disease that is a constant threat to life	Examples include (but not limited to): recent (<3 months) MI, CVA, TIA, or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis
ASA V	A moribund patient who is not expected to survive without the operation	Examples include (but not limited to): ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction
ASA VI	A declared brain-dead patient whose organs are being removed for donor purposes	

*The addition of "E" denotes Emergency surgery.
(An emergency is defined as existing when delay in treatment of the patient would lead to a significant increase in the threat to life or body part)

Preoperative medication management

- Medications: to continue or not?
- Need to understand risk/ benefit of continuing or holding a medication
- Diuretics, ACE Inhibitors, ARBS

  - should be discontinued 12-24 hr prior to surgery to prevent intraoperative hypotension

- Nitrates, Digoxin, Clonidine, Beta Blockers, Calcium Channel Blockers, and Antiarrhythmic drugs

  -Essentially safe to continue perioperatively

BOX 38-3 *Preoperative Management of Medications*

Instruct patients to take these medications with a small sip of water, even if fasting.

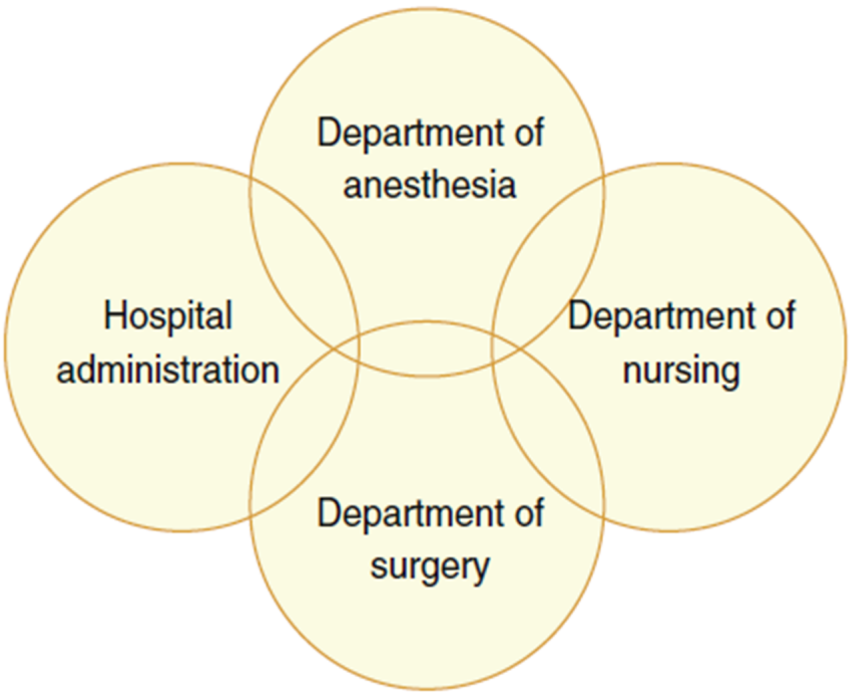
1. **Antihypertensive medications**
   Continue on the day of surgery.
   - **Possible exception:** For patients undergoing procedures with major fluid shifts, or for patients who have medical conditions in which hypotension is particularly dangerous, it may be prudent to discontinue ACEIs or ARBs before surgery.
2. **Cardiac medications (e.g., β-blockers, digoxin)**
   Continue on the day of surgery.
3. **Antidepressants, anxiolytics, and other psychiatric medications**
   Continue on the day of surgery.
4. **Thyroid medications**
   Continue on the day of surgery.
5. **Birth control pills**
   Continue on the day of surgery.
6. **Eye drops**
   Continue on the day of surgery.
7. **Heartburn or reflux medications**
   Continue on the day of surgery.
8. **Narcotic medications**
   Continue on the day of surgery.
9. **Anticonvulsant medications**
   Continue on the day of surgery.
10. **Asthma medications**
    Continue on the day of surgery.
11. **Steroids (oral and inhaled)**
    Continue on the day of surgery.
12. **Statins**
    Continue on the day of surgery.
13. **Aspirin**
    Consider selectively continuing aspirin in patients where the risks of cardiac events is felt to exceed the risk of major bleeding. Examples would be patients high-grade CAD or CVD. If reversal of platelet inhibition is necessary, aspirin must be stopped at least 3 days before surgery. Do not discontinue aspirin in patients who have drug-eluting coronary stents until they have completed 12 months of dual antiplatelet therapy, unless patients, surgeons, and cardiologists have discussed the risks of discontinuation. The same applies to patients with bare metal stents until they have completed 1 month of dual antiplatelet therapy. In general, aspirin should be continued in any patient with a coronary stent, regardless of the time since stent implantation.
14. **Thienopyridines (e.g., clopidogrel, ticlopidine)**
    Patients having cataract surgery with topical or general anesthesia do not need to stop taking thienopyridines. If reversal of platelet inhibition is necessary, then clopidogrel must be stopped 7 days before surgery (14 days for ticlopidine). Do not discontinue thienopyridines in patients who have drug-eluting stents until they have completed 12 months of dual antiplatelet therapy, unless patients, surgeons, and cardiologists have discussed the risks of discontinuation. The same applies to patients with bare metal stents until they have completed 1 month of dual antiplatelet therapy.
15. **Insulin**
    For all patients, discontinue all short-acting (e.g., regular) insulin on the day of surgery (unless insulin is administered by continuous pump). Patients with type 2 diabetes should take none, or up to one half of their dose of long-acting or combination (e.g., 70/30 preparations) insulin, on the day of surgery. Patients with type 1 diabetes should take a small amount (usually one third) of their usual morning long-acting insulin dose on the day of surgery. Patients with an insulin pump should continue their basal rate only.
16. **Topical medications (e.g., creams and ointments)**
    Discontinue on the day of surgery.
17. **Oral hypoglycemic agents**
    Discontinue on the day of surgery.
18. **Diuretics**
    Discontinue on the day of surgery (exception: thiazide diuretics taken for hypertension, which should be continued on the day of surgery).
19. **Sildenafil (Viagra) or similar drugs**
    Discontinue 24 hours before surgery.
20. **COX-2 inhibitors**
    Continue on the day of surgery unless the surgeon is concerned about bone healing.
21. **Nonsteroidal antiinflammatory drugs**
    Discontinue 48 hours before the day of surgery.
22. **Warfarin (Coumadin)**
    Discontinue 4 days before surgery, except for patients having cataract surgery without a bulbar block.
23. **Monoamine oxidase inhibitors**
    Continue these medications and adjust the anesthesia plan accordingly.

Planning for postoperative pain management

- All patients have the right to appropriate assessment and treatment of pain
- A preoperative evaluation should include baseline pain assessment
- Provides an important opportunity to discuss and plan for the management of acute postoperative pain
- Specific issues include their tolerance to usual doses of opioid analgesics and the potential for acute withdrawal reactions should be assessed

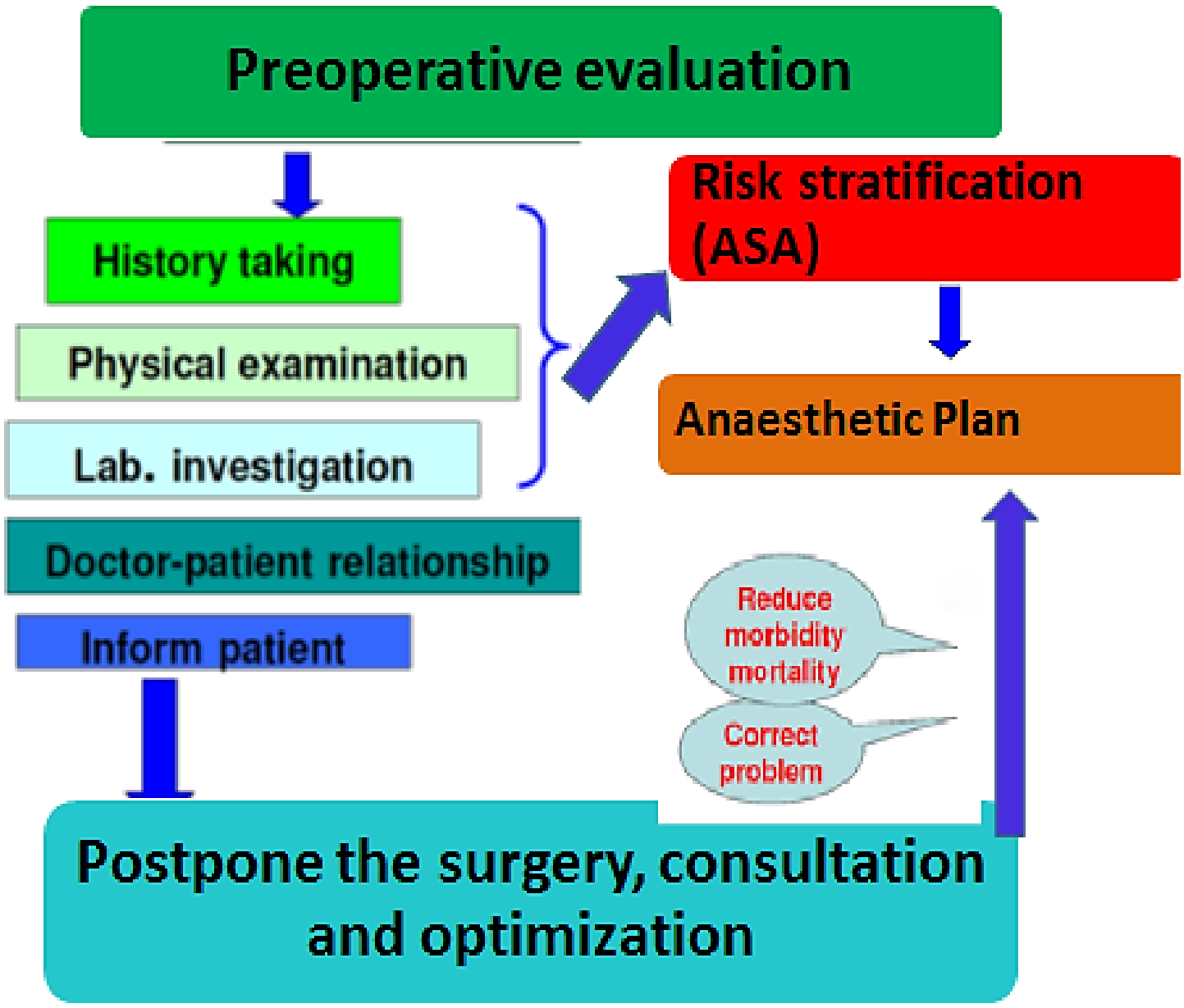
Collaboration, Commitment and Team work

- The preoperative evaluation clinic is a visible partnership among the departments of anaesthesia, surgery, nursing, and hospital administration to achieve common goals



Preoperative Evaluation Clinic
- Decreased cost
- Efficient services
- Clinical productivity
- Timely access to clinic

Summary



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निश्चेतना पूर्व मेडिकल जाँच Preoperative Assessment Chart

Registration No
Name:
Age:
Department:
Diagnosis:
Proposed Surgery:

Gender: Female/Male
Body weight-
Height-
BSA

Past History of illness and Surgery:

Pre Op Medications: Names and doses
Antihypertensive/Antidiabetic/Anticoagulant/Respiratory Medication/ Antiepileptics/Others

Examination: General condition: Consciousness: Anemia: Cyanosis:
Jaundice: Edema: Nails: Thyroid: Dentures/loose teeth
Heart Rate: **ABP:** **Breath Holding time: sec**
Airway: Mallampati grade: 1/2/3/4 loose Teeth: Y/N; Neck movement: Restrict/Free

Cardiovascular system:

Respiratory system: Central Nervous System

ECG: Chest x-ray:C/T ratio:
Echo-findings: Mitral: area: Regurge: Y/N;
Aortic:area: Regurerger:Y/N Fractional Short:
LV measurement: Syst/Diast/Septal: / / EF: %

Consent for Anesthesia:
मैं अपना/अपने मरीज का आपरेशन पूर्ण बेहोशी/स्पाइनल/ऐपीड्यूरल एनेस्थीसिया नस सुन्न कराके आपरेशन करवाने के लिए अपनी इच्छा से तैयार हूँ इसके सम्बन्धित सभी जानकारी और खतरे मुझे समझा दिये गये हैं और सकी जिम्मेदारी मुझ पर है।

Signature
Name: Dated:
Relation with Patient:

Pre-operative instruction:
American Society of Anesthesiologists (ASA) **Grade: I/II/III/IV/E**
NPO-after pm
Lorazepam/Diazepam/ : mg time
Scheduled morning medications with sips of water: Yes/No
Other instructions:

Investigations:

Hb/HCT
TLC
DLC: N L E M B
Urine: R/M
Blood sugar:
Renal: Urea /Cr/Bun
Liver: Tbil Direct
ALT/AST
Alk Phos
Total Protein: Albumin:
Globulin: Alb/Glb
PT/INR

Others:

Date of PAC: Place of PAC: Name and Signature

Pre-Operative Anesthesia Record:

Date of Surgery: Names of Anesthetists/Assistants:

Surgery Surgeons:

Anesthesia: GA/SpinalEpidural/others ( )

Operation Theater: I/II/III

Ventilation: Spontaneous/IPPV
Laryngoscope: Macintosh/Fiberoptic/McCoy
LaryngoscopyGrade: I/II/III/IV; Bouggie-Y/N
Airway type: LMA/ET tube/DLT
Size: (mm) Balloon air volume: ml)
ET tube fixed at mark: (cm)

Spinal needle size:
Epidural catheter size:
Vertebral space: Level of block
Drug used:
onset time: Duration

Vital Monitoring Chart

Time (min)		0	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	110	120	Remarks
	180																			
Induction	170																			
Incubation	160																			
Incision	150																			
IV fluids	140																			
IV fluids	130																			
HR(.)	120																			
SAP (.)	110																			
DAP (.)	100																			
MAP (*)	90																			
CVP(+)	80																			
SPO2 (0)	70																			
Body Temp	60																			
ET CO2	50																			
	40																			
Urine Out	30																			
	20																			
	10																			
	0																			

Anesthetic Drugs and Fluid Chart

Time (min)->	0	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	110	120	130	140	Remarks
Propofol																					
Fentanyl																					
Relaxant																					
N Saine																					

Post operative instructions:
oxygen by mask:
analgesic:
antiemetic:
PCA Medication:
Body surgace warmer: Yes/No

Signature_____

Name: _____

Post Operative Recovery:
Consciousness:
Muscle Movement:
Heart rate:
Blood Pressure:
Oxygen Saturation:
Body temperature:
Pain Score:
Nausea Vomiting:
Critical Event:

अखिल भारतीय आयुर्विज्ञान संस्थान, ऋषिकेश

निश्चेतना एवं गहन चिकित्सा विज्ञान विभाग

रोगी निर्देश

आधुनिक शल्य चिकित्सा, मरीज को पूर्ण रूप से बेहोश अथवा निश्चेतित (जनरल एनस्थीशिया) की जाती है। निश्चेतना का उद्देश्य दर्द से मुक्ति के साथ-साथ मरीज को शल्य प्रक्रिया से होने वाले समस्त दुष्प्रभावों से सुरक्षित रखना है। सम्पूर्ण बेहोशी के लिये विभिन्न दवाओं को शरीर में पहुँचाया जाता है और शल्य क्रिया शेष होने पर दवाओं के असर को परिवर्तित करके मरीज को सुरक्षित वार्ड में भेज दिया जाता है। सुन्न करने (रीजनल एन्स्थीशिया) के लिए, दवाओं को पीठ से मेरूदण्ड में दिया जाता है, जिसका असर स्वत: कुछ घंटों में समाप्त हो जाता है।

निश्चेतना के लिए प्रयोग की जाने वाली सभी दवाएँ अत्यधिक प्रभावयुक्त होती है और फेफडों, हृदय, जिगर व गुर्दों की बीमारी की अवस्था में घातक भी हो सकती है, विशेषत: जब इन बीमारियों के विषय में एनेस्थेटिस्ट को न बताया गया हो। अत: यह बहुत आवश्यक है कि आपके एनेस्थेटिस्ट को न बताया गया हो। अत: यह बहुत आवश्यक है कि आपके एनेस्थेटिस्ट का इन अंगों से सम्बन्धित बीमारियों एवं उनके निदान हेतु ली जाने वाली दवाओं के विषय में अवगत करा दिया जाय। इससे बेहोशी की दवाओं के चयन में बहुमूल्य मदद मिलती है। शल्य क्रिया व बेहोशी के दौरान आपकी बेहतर देखभाल करने हेतु निम्न सुझावों को ध्यान से पढें व पालन करें।

पालन करें।

- पूर्व निश्चेतना जाँच (पी0ए0सी0) के समय श्वास, हृदय, रक्त चाप, जुकाम, बुखार, डायबिटीज आदि बीमारियों एवं ली गई विभिन्न दवाएँ पिछले ऑपरेशन के दौरान किसी परेशानी अथवा एजर्ली के बारे में विस्तार से चिकित्सक को बतायें।
- ऑपरेशन से पूर्व रात को 10 बजे के बाद कुछ न तो खायें और न ही कुछ पियें।
- नमक के पानी का गरारा व दाँतों की उचित सफाई रोज करें।
- धूम्रपान ऑपरेशन से एक महीने पूर्व अथवा कम से कम एक सप्ताह पहले से अवश्य बन्द कर दें।
- ऑपरेशन के दिन प्रात: पूर्ण स्नान साबुन से करे यदि सम्भव न हो तो पूरे शरीर की सफाई (स्पंजिंग) गीले तौलिये से करें।
- नियमित रूप से ली जाने वाली दवाओं की सुबह की खुराक कम से कम पानी के साथ ऑपरेशन के दिन प्रात: अवश्य ले।

नहीं करें!

- नकली दाँत व घडी, अंगूठी व अन्य आभूषण ऑपरेशन से पूर्व निकाल कर सुरक्षित रख लें।
- नेल पालिश न लगाये।

निश्चेतना से सम्बन्धित अपनी सभी आशंकाओं का निदान (पी0ए0सी0) के दौरान अपने चिकित्सक से सुनिश्चित कर लें। यह आपके हित में है।

All India Institute of Medical Sciences, Rishikesh

Department of Anaesthesiology and Peri-operative Medicine

Patients' Instructions

General or regional anaesthesia is commonly practiced to make the patients pain-free during various operations performed in various surgery departments. The Anaesthesiologist keeps you reversibly unconscious, pain-free, protecting your from the stressful period of surgery as well as safeguards you from the adverse-effects of the surgery in operation theatre. Under general anaesthesia combination of drugs are administered either by intravenous route or through the lungs (inhalational anaesthetics) and muscle paralysing drugs. At the end of surgery effects of these drugs are reversed to make you awake immediately at the end of surgery. In regional anaesthesia, drugs are injected into the vertebral canal to block the sensations and movement of lower half of body as you remain awake during surgery.

These anaesthetic drugs are extremely potent and can be hazardous in presence of undetected heart, lung, liver, and kidney diseases. therefore, it becomes extremely important for your anesthesiologist to know about the disease and the extent of damage pertaining to these organs and also the concomitant medicines being ingested by you. This helps to your anaesthesiologist to plan the safest method anaesthesia for your surgery, Hence for the safe anaesthetic care and outcome during operation, we suggest following guidelines for you own safety during stressful surgery for your disease:

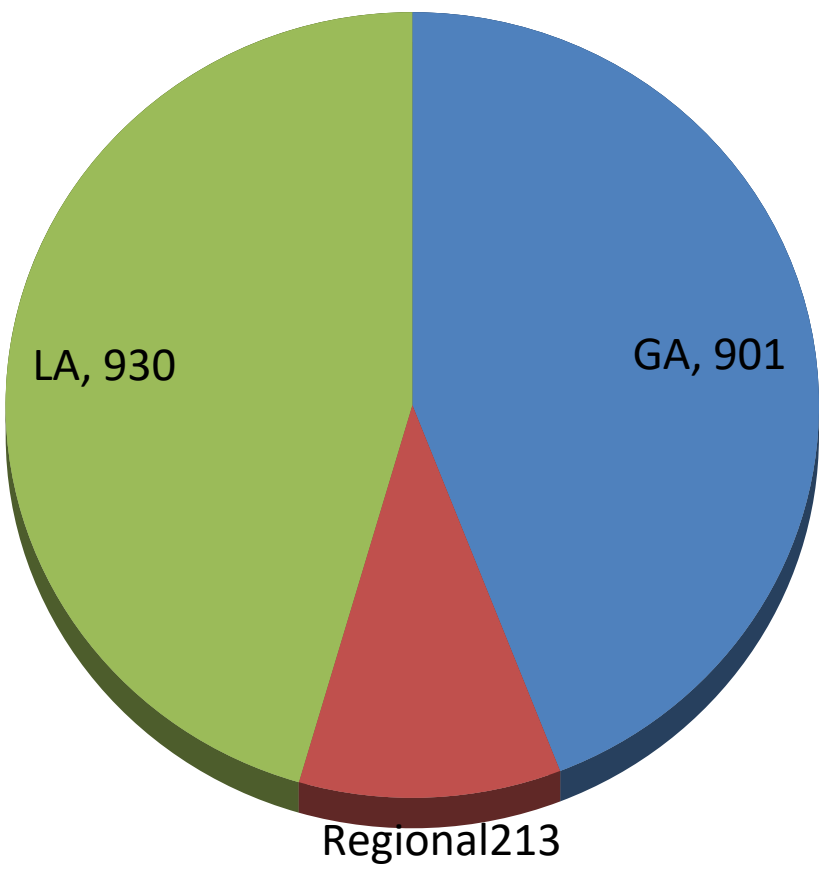
DO's:

1. During pre-anaesthetic check-up (PAC) inform the anaesthesiologist about any disease pertaining to heart, lung, kidney, fever, high blood pressure, diabetes etc, medicines taken by you, any previous operations and anaesthesia outcome, drug allergies etc.
2. Brush your teeth and hot saline water gargle twice daily while waiting for surgery
3. Stop somking preferably one month before planned surgery, if not possible then atleast one week before surgery.
4. Take a thorough bath or body sponging one day before and on the day of surgery
5. Take morning doses of regular medications with sips of water only
6. Remove artificial dentures, ornaments before going to operation theatre
7. Equire frankly from your anaesthesiologist during PAC or in operation theatre about any query in your mind regarding anaesthesia planning

DONT'S :

8. Do not take anything by mouth after 10 pm the night before surgery
9. Do not carry any precious ornaments, metallic garments, synthetic material clothes in operations theatre.
10. DO NOT HIDE YOUR HEALTH PROBLEMS BECAUSE YOU WILL SUFFER THE BAD EFFECTS OF ANAESTHESIA DRUGS OR SURGERY

Surgeries done (w.e.f 3/6/14 till date)



- OPD based Preoperative evaluation was done
- Grave morbidity- 7 cases (0.003%)