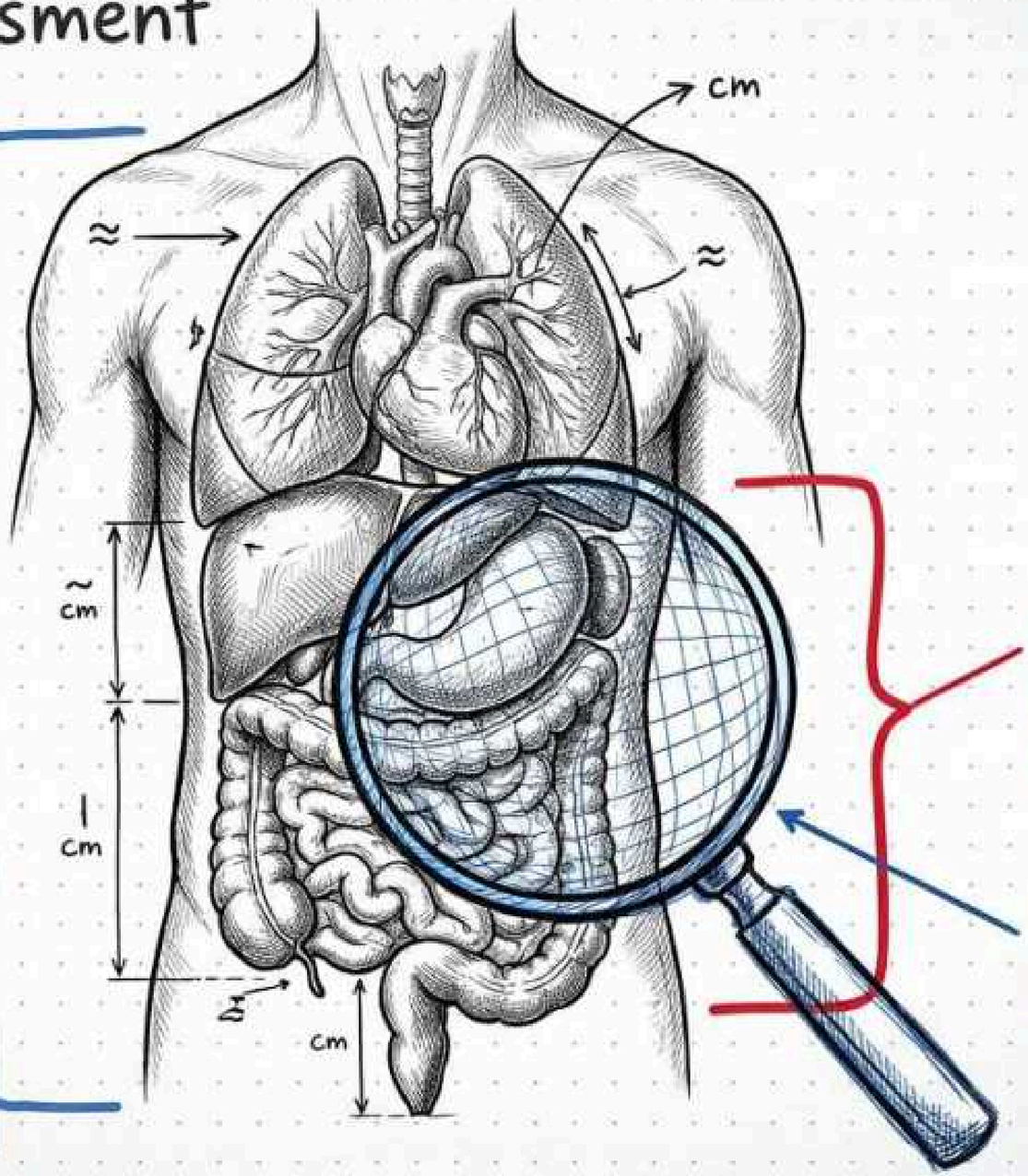
The Surgical Assessment

¶ 1.1

Focus:
Overall fitness
for operation.



Focus: Signs of infection or obstruction.

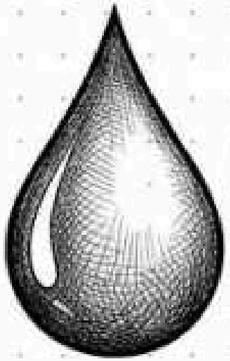
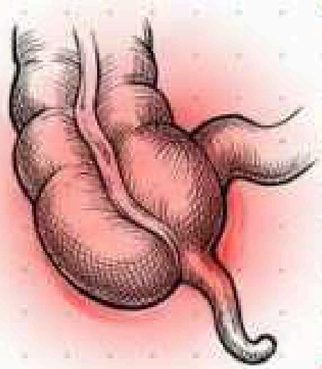
Imaging defines the anatomy of the problem.

Surgical care begins with standard history and examination, narrowed to the surgical problem.

The Urgency Matrix

¶ 1.2

Increasing Time Allowance

Immediate	Urgent	Expedited	Elective
Minutes	Hours	Days	Planned
Save life or limb	Treat acute conditions	Sub-acute resolution	Timing suits the patient
			
Major bleeding	Appendicitis	Symptomatic conditions	Hernia repair or joint replacement

The Risk Equation

$$P(\text{Complication}) = \int (\text{Patient Factors}) + (\text{Operative Factors})$$

Heart/Lung disease, Diabetes, Kidney function, Frailty, Nutrition, Medicines

ASA Physical Status Classification



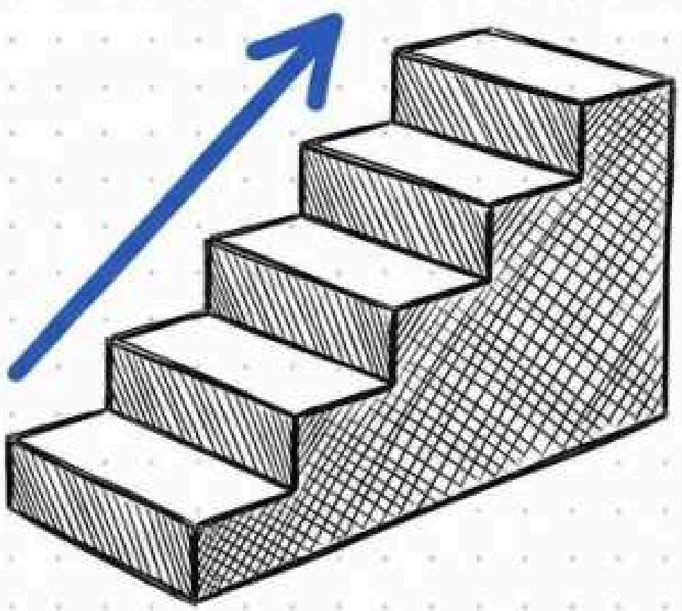
1 — Healthy

6 — Moribund

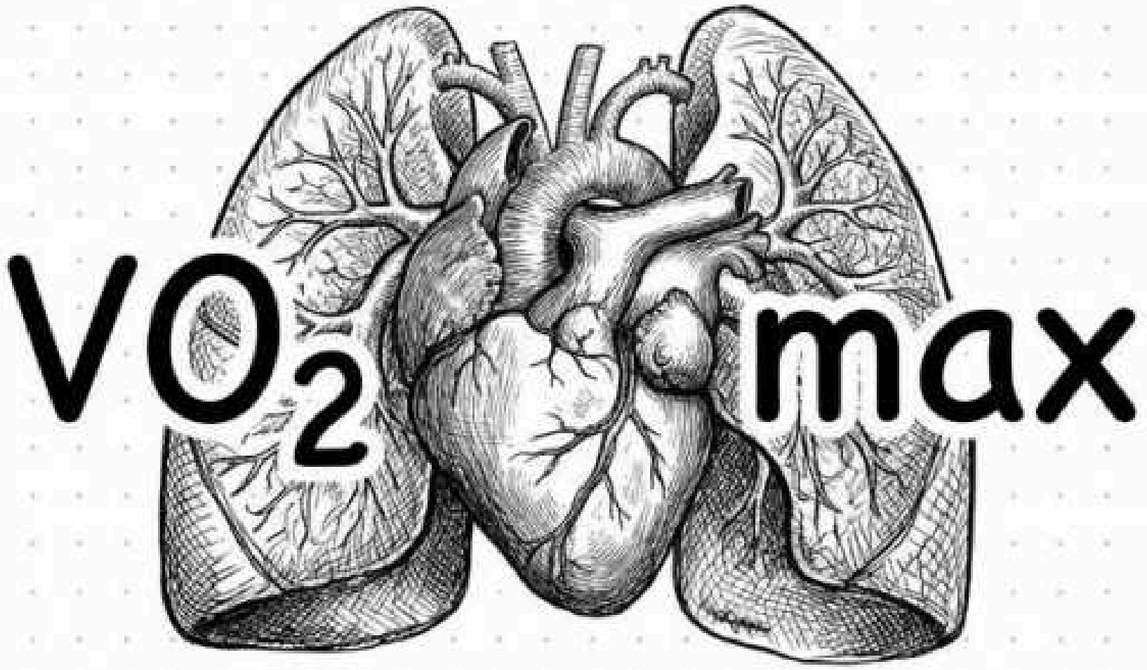
Risk calculators combine these variables to estimate complication probabilities and guide preparation.

Functional Capacity

¶ 1.4



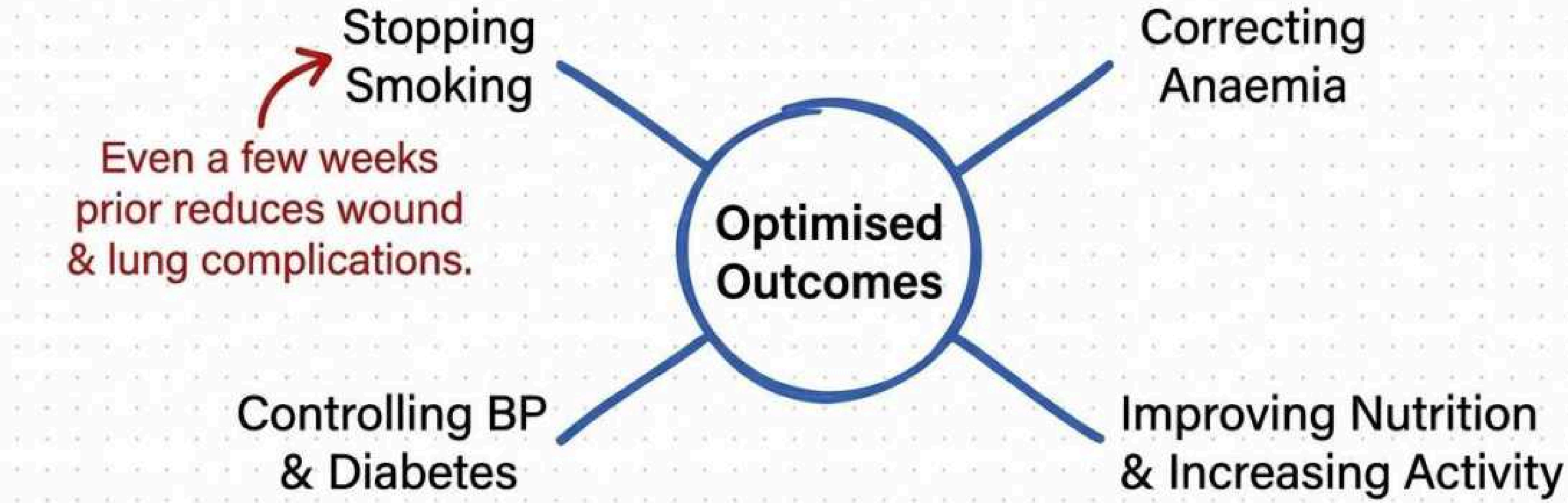
The Heuristic: Two flights of stairs without stopping.



The Precision: Cardiopulmonary Exercise Testing (CPET) is required before major surgery.

Prehabilitation

¶ 1.5



For elective surgery, active optimization beforehand dramatically alters the baseline risk profile.

The Process of Consent

¶ 1.6

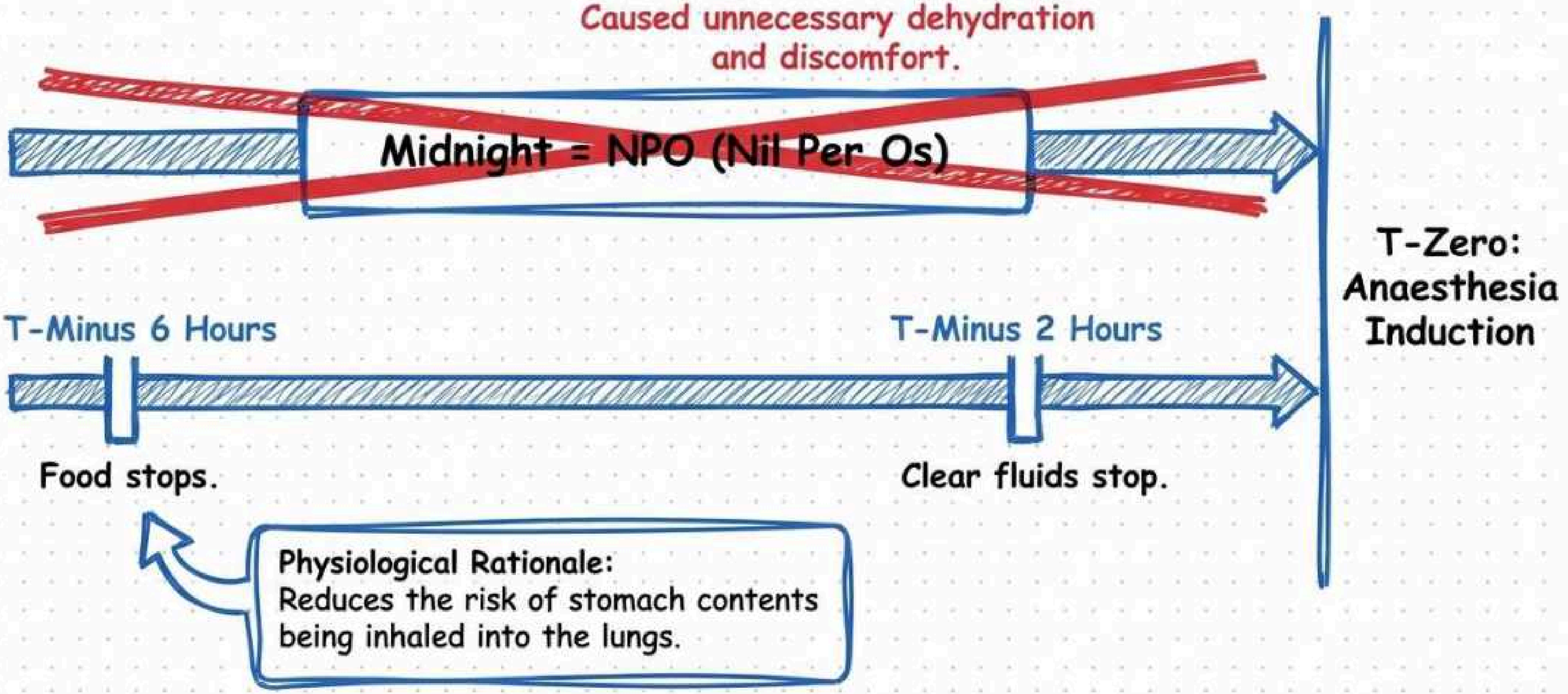




It is a process, not just a signature. Patients require time to consider.

The Fasting Countdown

¶ 1.7



Pharmacological Management

¶ 1.8



Blood Thinners

Stop timing depends strictly on the drug type and the specific bleeding risk of the operation.

Diabetes Medicines



Dosages require adjustment based on fasting state.

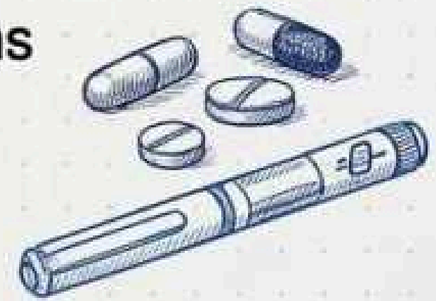


Steroids

May require extra stress dosing to cover the physiological stress of surgery.

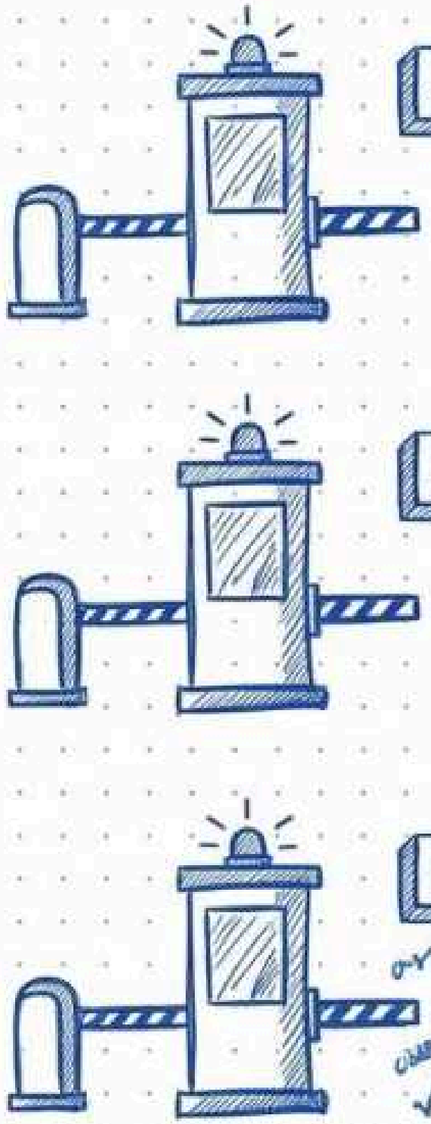
Weight-Loss & Newer Diabetes Drugs

Require special precautions due to slowed stomach emptying.



The WHO Safety Checklist

¶ 1.9



Stage 1: Before Induction

- Identity, Expected blood loss ✓
- Allergies, Team introductions ✓

Stage 2: Before Incision

- Operation confirmed
- Equipment ready
- Antibiotics given

Stage 3: Before leaving OR

- Instrument counts ✓
- Specimen labeling ✓
- Recovery concerns ✓

Marking the operation site prevents wrong-site surgery.

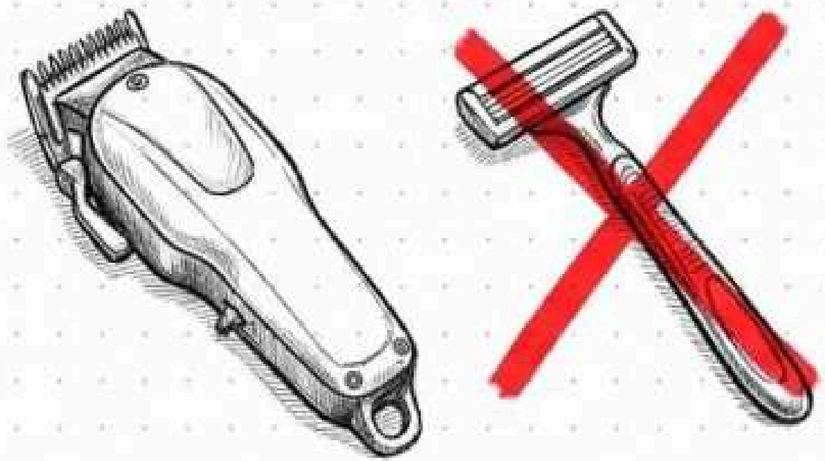
Standard WHO framework detailed in Med 535 B

Perioperative Prevention

¶ 1.10

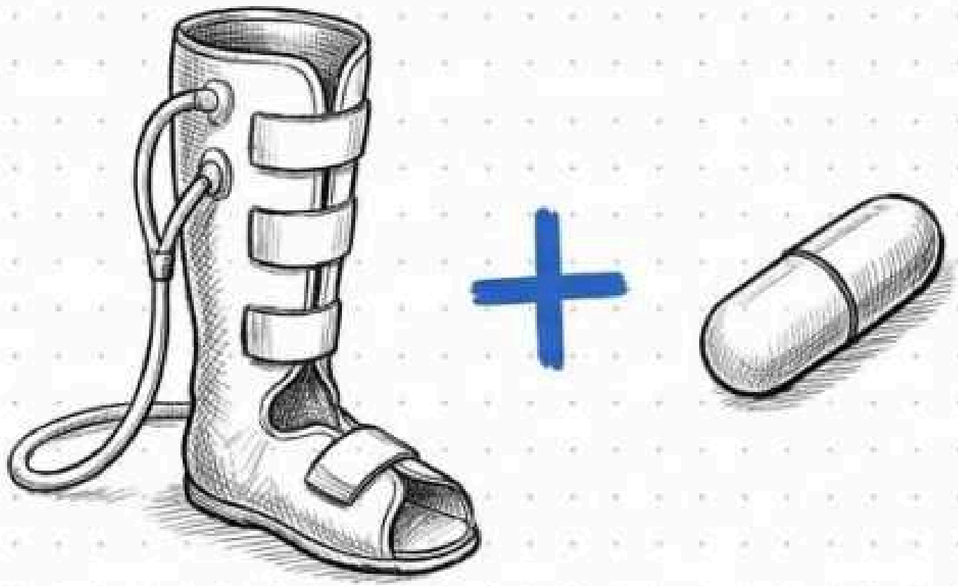
Infection

Antibiotics < 1 hour before incision for many operations.



Skin preparation with antiseptic.

Blood Clots



Requires planned mechanical devices + pharmacological drugs.

The Surgical Preparation Synthesis

¶ 1.11

