

Introduction to Anaesthesia

Dr. Ahmed H. Al-Daour

Consultant anesthetist

M.B.Ch,B . ,PhD, PBA &ICU

Head of anesthesia department Shifa hospital

Defnition of Anaeshteisa

- pharmacologically
partial complete loss
reverse

-
-
-

Types of Anaesthesia



General anesthesia

Essential Components of general anesthesia :

Golden triangle



A diagram illustrating the 'Golden triangle' concept. A yellow rectangular box containing the text 'Golden triangle' is positioned on the left. Two blue curved lines originate from the right side of this box. One line curves upwards and to the right, pointing towards the text 'Essential Components of general anesthesia :'. The other line curves downwards and to the right, pointing towards the text 'Non Essential Components of general anesthesia :'. This visualizes the 'Golden triangle' as the relationship between these two essential components.

Non Essential Components of general anesthesia :

Hypnosis



Classification



Analgesia



Classification of Analgesics



Opioids analgesic drugs



Neuromuscular relaxation



Classification of NMBA



Classification of NMBA



Sedation and Amnesia



Midazolam and propofol are sedatives.

control of reflexes



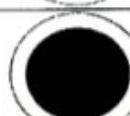
Stages of general anaesthesia



• Salivary secretions decreased, eye pupils dilated

- Guedel's classic signs of anesthesia (stages of anesthesia).

They are seen in patients premedicated with atropine and morphine and anesthetized by ether but are not so obvious with recent inhalational agents.

Stage	Respiration	Pupils size	Eye reflexes	Respiration reflexes
1-Analgesia by 50% N ₂ O in O ₂	-Regular -Small volume		-All are present	-All are present
2-Excitment	-Irregular and erratic with breath holding		-Eyelash reflex is absent	
3-Anesthesia Plane I	-Regular -Large volume		-Eyelid reflexes are absent with resistance to lid elevation -conjunctival reflexes are depressed	-Pharyngeal reflexes ,vomiting and gag are depressed -Swallowing is present
Plane II	-Regular -Large volume		-Corneal reflexes are depressed	-Laryngeal reflexes are present e.g. anal stretch causing laryngeal spasm
Plane III (Surgical Plane)	-Regular -Be diaphragmatic -Small volume		-Lacrimation is absent	-Laryngeal reflexes are depressed
Plane IV	-Irregular -Be diaphragmatic -Small volume			-Carinal reflex is depressed
4- Overdose	-Respiratory (and CVS) depression → apnea		-All brain stem reflexes are depressed then absent	-All brain stem reflexes are depressed then absent

ASA classification



Asa classification

Fit healthy patients with no	ASA I
A patient who have one or	ASA II
A patient who have one or	ASA
A patient with one organ or	ASA
A patient who is going to die	ASA V
Brain death patients	ASA
without an operation	VI
candidates for organ	

E : denotes an emergency in any one of the classes
transplantation above

Asa fasting guidelines

ASA Fasting Recommendations

<u>Ingested Material</u>	<u>Minimum Fasting Period</u>
Clear liquids	2 h
Breast milk	4 h
Infant formula	6 h
Nonhuman milk	6 h
Light meal	6 h
Meal	8 h

These recommendations apply to **healthy patients** who are undergoing **elective** procedures.

The pregnant women's more than 28 weeks who are undergoing elective procedures must have fasting period at least 8 h.

The fasting periods noted above apply to patients of **all ages**.

- Clear liquids include water, fruit juices without pulp, carbonated beverages, clear tea, and black coffee.
- Light meal consists of toast and clear liquids.
- Meals include fried or fatty foods or meat.

•

•

•

•

•

•

•





•

I.

•

II.

•

•

•

•

•

•

•

I.

•

•

•

•

•

•

•



•

•

•

•

•

•

•

•



•

•

•

•

•

•

•

•







• **Chlamydomonas has been eliminated**

- pregnancy liver disease kidney
failure heart failure thyrotoxicosis

Many
Thanks
