

Q - Regional anesthesia (Discuss) / Local anesthesia

- Uses of Regional (Local anesthesia)

- Complications

- Name 03 local anesthetics

Regional anesthesia :-

Definition :-

Injection of local anesthesia agents directly to the surgical area to block the pain sensation.

MOA :-

Local anesthesia agents



Reducing the membrane permeability to sodium



small unmyelinated fibers

Large unmyelinated fibers



Pain sensation

Temperature sensation reduced.

Available technique :-

- Topical anesthesia
- Local infiltration
- Regional Nerve block
- Central Neuroaxial block.
 - ↳ spinal
 - ↳ Epidural.

Name of local anesthesia

- Lignocaine
- Bupivacaine
- Prilocaine
- Ropivacaine
- Levobupivacaine.

Uses of local anesthesia :-

- ① - Diagnostic - to isolate a source of pain
- ② - Therapeutic - to reduce or abolish the pain of painologic condition.
- ③ - Peri-operative - To achieve comfort during operative procedures.
- ④ - Post-operative - to reduce post-operative pain.

Complication :

Local - Infection
hematoma.

Systemic -

Overdose of Lignocaine

↓
Depress conscious level

Convulsions

Arrhythmia

Myocardial depression.

Rx by

- Trendelenburg's position

- oxygenation

- Barbiturate

Bupivacaine

- cardiotoxic

safest)
Anesthesia

← Prilocaine

- Methaemoglobinemia.

(CI) - contraindication

Allergy

Clotting Disorder

Infections.

Q - Write a note on Lignocaine

↓

Most common used local anesthetic

Remain for 1-2 hr

Available in form of

↓

① - Injection for filtration

② - 4% Topical spray for mucous

③ - Lignocaine gel for urethral
catheterization.

used with or without adrenaline.

Q Used of Lignocaine + adrenaline.

Advantage: ↓ chances of Toxicity due to slow
absorption of drug.

Large dose of Lignocaine can be given

Provide bloodless field for surgery.

↑ Duration of action.

Disadvantage.

can cause gangrene if applied

on periphery - Fingers

Toes

due to vasoconstriction.

can't be given to patient

taking following drugs.

Monoamine oxidase inhibitors

TCA - tricyclic antidepressant.

Anti-hypertensive agent

Q Two imp Local anesthesia - Dosage - use - Side effect

Chlorocaine - 6 mg/kg

9 mg/kg + Adrenaline.

- Use - Drug of choice for IV (Burr's block)

- side effect - Methaemoglobinemia.

Lignocaine - 3 mg/kg/body

7 mg/kg

- Use - Drug IV (Burr's block)
used for

- side effect - Depress consciousness

convulsion

Arrhythmia

ML

Q. Define Pain

- Enlist Pain types

- Harmful effects of pain on renal system

- Harmful effects of pain on coagulation.

- Benefits of effective post-op pain relief

- Methods of Acute pain relief.

Q. Define :

An unpleasant sensory and emotional experience associated with actual or potential tissue damage.

Types :

Acute

chronic - Bone pain

Post-surgical

Post-Traumatic

Cancer

Neuralgic

Psychogenic

Neuropathic

Nociceptive

Radicular.

① Harmful effect of pain on venal system

↓

Absent of Pulse

DVT

Chest pain

Thrombophlebitis

Stasis.

① Harmful effects of pain on coagulation.

DVT

Clot formation

Bleeding diathesis

↓ Fibrinolysis

↑ Platelet aggregation.

① Benefits of effective post-op pain relief.

Improved comfort

↑ Breathing + coughing

↓

Expand The lungs.

↑ Mobility

Patient cooperation is assured.

Prevention of GIT-Immobility.

Q. Methods of acute pain relief.

Paracetamol

NSAIDs

- Ibuprofen
- Diclofenac.

Codrine

Opioids + Paracetamol combination.

IM - Morphine

IV - Morphine.

PCA - Patient control analgesia.

Epidural analgesia.

Psychological + Behavioural tech

- Good nursing technique
- Healthy environment
- Hypnosis
- Acupuncture.

Q. Name 04 Opioid analgesics agents

↓

Morphine

Codiene

Fentanyl

Tramadol.

Name two nerve-blocker

↓

Lidocaine

Bupivacaine.

Name two predictors of post-op pain

↓

Incision size.

surgical type

Anxiety

Gender.

What's pre-emptive analgesia.

↓

Starts before surgery.

Prevent pain caused by incision.

prevent pain caused by inflammatory injury,

Before onset of stimuli;

① Types of Muscle Relaxant

↓

Baclofen

Paracetamol

Ibuprofen

Diazepam

~~Carvedilol~~

Tizanidine

CI of Muscle Relaxant

Liver toxicity

myasthenia gravis

Parkinsonism.

① IV-anesthetic

~~Propofol~~

Propofol

Thiopentone

Etomidate

Ketamine

① - Analgesics :

Dimorphine
Morphine
Codeine
Fentanyl

② - CI of Aspirin Use



Aspirin
Allergy
viral infection
Chicken pox
Peptic ulcer.

③ - Four Inhalational anaesthetics

Use of "

Delivery of "

① - Sevoflourane - Induction of G. anaesthesia

Halothane - Maintenance of G. anaesthesia

Isoflurane.

③ - Delivered by

Face-mask

LMA

Tracheal Tube.