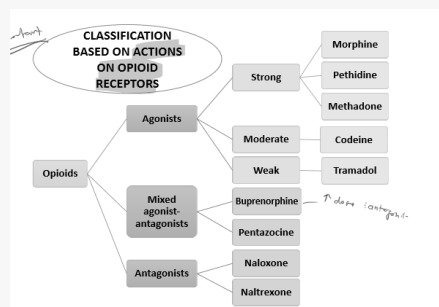


Type of analgesics

Opioids NSAIDs Paracetamol

Opiod = poppy

Opioids classification (Action on Rc)



Opioid Receptor

3 types opioid Rc

μ , κ , δ

Type of Rc

GPCR

Action of opioids

1. Close voltage gated Ca^{2+} in presynaptic neuron ($\downarrow$ NT release).
2. Open K^{+} channel in postsynaptic neuron ($\downarrow$ response to NT)

Functional effect associated with Rc

μ -> Respi depress, euphoria

κ -> Hallucination, dysphoria

δ -> less analgesic effect

Pharmacological effect

Pharmacokinetics

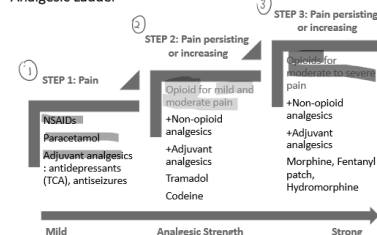
Cross BBB (Lipophilic: morphine < fentanyl, methadone, heroin)

Cross placenta

Poor oral bioavailability

Analgesic ladder

Recommended Analgesics Based On WHO 3 Steps Analgesic Ladder



Opioids agonist

Heroin & Morphine

Acute MI, pulm edema, cancer

Fentanyl

Anaesthesia, Extremely potent, transdermal patch

Pethidine

labor ($\times$ $\downarrow$ uterine force, $\downarrow$ respi effect neonates)

Methadone

relieve opioid dependence

Codeine

mild pain, AE: constipation

Dextromethorphan

antitussive, cns effect

Tramadol

safe in lactation, post operative pain

Loperamide

diarrhea, neuropathic pain

Buprenorphine

partial agonist on μ

Pentazocine

rarely use dt AE

Opioid antagonist

Adverse effect

D Dry mouth
E Euphoria
S Sedation
I Itch (Histamine release)
G GI (constipation)
N Nausea and vomiting
E Eyes (pupillary constriction)
R Respiratory depression

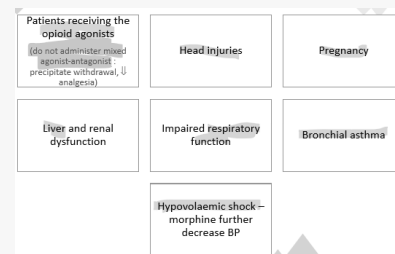
Opioids poisoning: CLinical triad

1. CNS depression
2. Respi depression
3. Pupil constriction

Withdrawal symptoms

W Withdrawal
I Irritability / Insomnia
T Tremors / Tachycardia
H Hypertension
D Diarrhoea / Diaphoresis
R Rhinorrhoea
A Anxiety / Arthralgias / Myalgias
W Weight loss (anorexia)
A Abdominal cramps
L Lacrimation

Contraindication



Respi depression ↓ sensitive to pCO₂,
pCO₂ ↑, dilatation cerebral vessel, ↑ intracranial pressure

Euphoria

Cough suppression

Sedation

Miosis Feature drug abuse &
opioid poisoning, Antidote:
iv naloxone

Histamine release

Hypotension, bradycardia

Smooth muscle effect ↑ GIT tone → Constipation,
↓ uterine tone → prolong
(GIT, bladder, labor
uterus

Naloxone

Rapid reversal, no tolerance, no
withdrawal syndrome

Naltrexone

Longer DOA

Nalorphine

causing physical dependence



By **aina**
cheatography.com/aina/

Published 23rd July, 2022.
Last updated 23rd July, 2022.
Page 1 of 2.

Sponsored by **CrosswordCheats.com**
Learn to solve cryptic crosswords!
<http://crosswordcheats.com>