

PATHOPHYSIOLOGY OF OPIOID WITHDRAWAL

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THE DOPAMINE EFFECT



THE DAYS OF
“NORMAL PAST”



CRAVING OUT
OF CONTROL



THE NEW
NORMAL

TOLERANCE

Initial phase

- MOR
- cAMP
- Epigenetic effect

Stable phase

- Impact on emotion
- Impact on neonate
 - Special case for methadone

WITHDRAWAL

The Locus Coeruleus

Increased NE activity (hyperactivity)
Indirect increase in RAS activity (poor sleep architecture)

PAG

- Opioid dependence induces coupling of mu-receptors to presynaptic inhibition in GABAergic nerve terminals in the PAG
- The removal of the opioid decouples this interaction

TREATMENT

1

Opioids

- Buprenorphine
- Methadone
- Morphine

2

Alpha 2 agonists

- clonidine
- dexmedetomidine
- lofexidine

3

Benzo's

- Diazepam
- Chlordiazepoxide

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