Opioids in the Treatment of Chronic Pain

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Efficacy

Barriers

Pain reduction

Max. Dosage

Differences

Average dosage

Equipotent dosage

Rotation

Kombinations

Side effects

Physical dependance

Tolerance

Guidelines

Addiction
Opioids work, especially in post-herpetic neuralgia and diabetic neuropathy.
Expect a 30 per cent reduction in pain.
There are barriers of various types, including physician, patient, and administrative.
There are significant differences between the various drugs, which have different proprieties.
Average doses in trials are ~ 100 mg of morphine, or equivalent, per day.
There is no evidence that increasing the dose above 200 mg of morphine, or equivalent, per day produces benefit.
We need to consider rotation of opioids if tolerance occurs.
Buprenorphine transdermal 35 mcg/h
Fentanyl transdermal 25 mcg/h
Hydromorphone slow release 8 mg
Methadone 20 mg
Morphine slow release 60 mg
Oxycodone slow release 30 mg
The combination of opioids with anticonvulsants is beneficial.
Adverse events can be a major problem and often lead to patients discontinuing medication in spite of pain relief.
The most common are constipation, nausea, drowsiness, dizziness, pruritus, with some patients reporting vomiting, headache, dry mouth and sweating.
Respiratory depression, always cited as a potential risk, has never really been noted in clinical practice in patients who have pain, with the use of sensible dosing.
Side effects need to be managed aggressively.
„Constipation Ladder“

1. Magnesium (Magnesiocard ®, Magnesium San Pellegrino ®)
2. Osmotic Laxative (Movicol ® Transipeg ®, Duphalac ®)
3. + Propulsive Laxative (Laxoberon ®)
4. + Enema
5. + Naloxon

Targin = Oxycontin + Naloxon
Opioid Induced Hyperalgesia

- 85 y old, mastectomy
- 3400 mcg/h Fentanyl TTS
- Extreme pain
- Epidural catheter, reduction of fentanyl TTS to 200mcg/h
- Good pain relief
Tolerance occurs but can be treated by adjusting the dose appropriately.
A withdrawal syndrome can be prevented by slow reduction of the dose.
There is no proof that the addiction potential in pain patients is higher than in the general population.
Begin Remifentanil (Ultiva) 0.04 mcg/kg/min (150 mcg/h) and slow increase

End: Pain reduction > 50%, or VAS ≤ 3, RR ≤ 7, SaO₂ ≤ 85%, heavy sedation

Responder or non responder

Patient goes home after 1 hour
1. Case

85 year old lady with back pain and osteoporosis

- Tramadol: heart beating and no effect
- Buprenorphin TTS, initially 1/8 patch till 1 patch 35 mcg/h
- Pain reduction 30%, sleep much better, increased social activity
2. Case

42 year old lady with failed back surgery syndrome

- Arrived to our pain unit with heavy pain, trembling and agitation. Medication: Fentanyl TTS 100 mcg/h every 3 days, Antiepileptics, antidepressants.

- Opioid rotation. Finally: Fentanyl TTS 25mcg/h every 2 days und Methadone 70mg/day.

- 60% less pain
According to several studies: no cognitive deficiency with constant dose

Switzerland: driving is allowed

We discuss driving ability in each patient individually!
Principals of Opioid Therapy

- Weak opioids first
- Definition of goals
- Beginning: Slowly, individually (side effects!), TTS dividing
- Steady state: Slow release forms/TTS
- Short-acting opioids should be avoided
- Opioid rotation (if not enough effective, side effects, high dose)
Opioids

Non Cancer
- late begin
- limitation of max. dose
- seldom break through medication
- never parenteral
- aim: increasing activity

Cancer Pain
- early begin
- no max. dose limits
- always break through medication
- every formulation
- aim: pain reduction
Short Release Formulations

- Morphine drops
- Buprenorphine sub-lingual
- Oxycontine liquid
- Hydromorphone Kps
- Actiq Lolli

10% of 24h dose: Cancer Pain: hourly
Non cancer: 3x/week
Only one doctor should take responsibility for the treatment. He should be experienced in the treatment of pain and the use of opioids.
Patients should be informed about the kind of treatment they receive and the potential side effects; they should give their consent to it.
A treatment concept should be discussed; this should not be based on analgesia only.
In the beginning, patients should renew their prescriptions weekly; consultations become less frequent over time.
Guidelines

- Improved analgesia should be complemented by increased activity. Physical and social integration should be improved.
A relative contraindication consists of anamnestically known addiction behaviour to one of the drugs.
After choosing the opioid for the treatment and the administration modus, the drug should be prescribed on the clock and not on demand.
In unusually high dose increases, the situation should be reviewed. The disease progress or other facts should be clarified.
The doctor should evaluate the development of the pain treatment. The effects, side effects, well being, and behaviour of the patient should be especially documented during therapy.