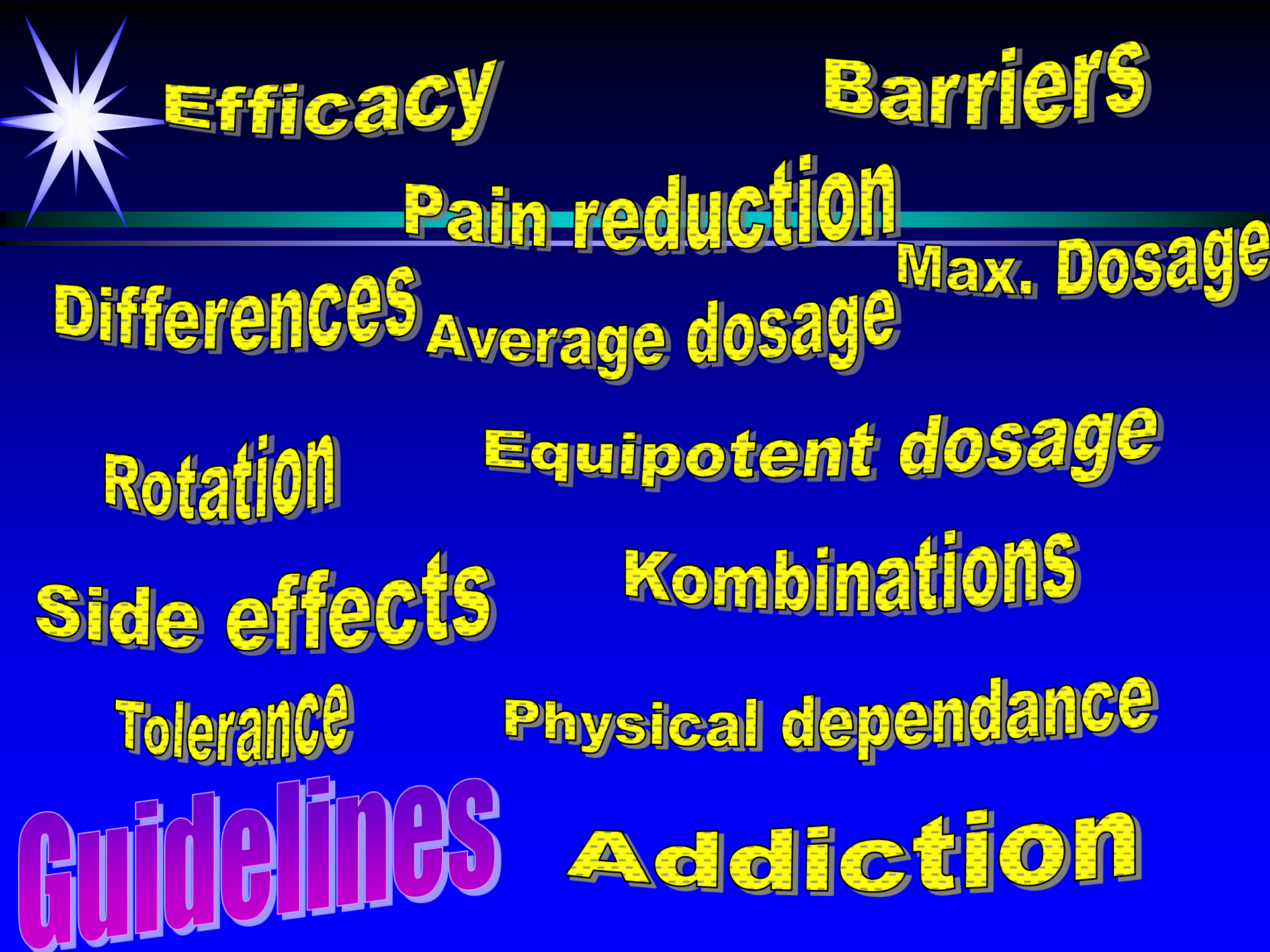




Opioids in the Treatment of Chronic Pain

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Efficacy

Barriers

Pain reduction

Differences

Average dosage

Max. Dosage

Rotation

Equipotent dosage

Side effects

Kombinations

Tolerance

Physical dependance

Guidelines

Addiction

Efficacy



Opioids work, especially in post-herpetic neuralgia and diabetic neuropathy.



Pain reduction



Expect a 30 per cent reduction in pain.

Barriers



There are barriers of various types, including physician, patient, and administrative.

Differences



There are significant differences between the various drugs, which have different proprieties.



Average dosage



Average doses in trials are ~ 100 mg of morphine, or equivalent, per day.



Max. Dosage



There is no evidence that increasing the dose above 200 mg of morphine, or equivalent, per day produces benefit.



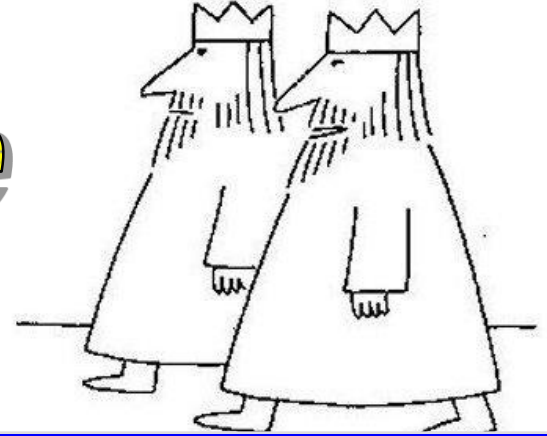
Rotation



We need to consider rotation of opioids if tolerance occurs.



Equipotent dosage



- **Buprenorphine** transdermal
- **Fentanyl** transdermal
- **Hydromorphone** slow release
- **Methadone**
- **Morphine** slow release
- **Oxycodone** slow release

35 mcg/h

25 mcg/h

8 mg

20 mg

60 mg

30 mg

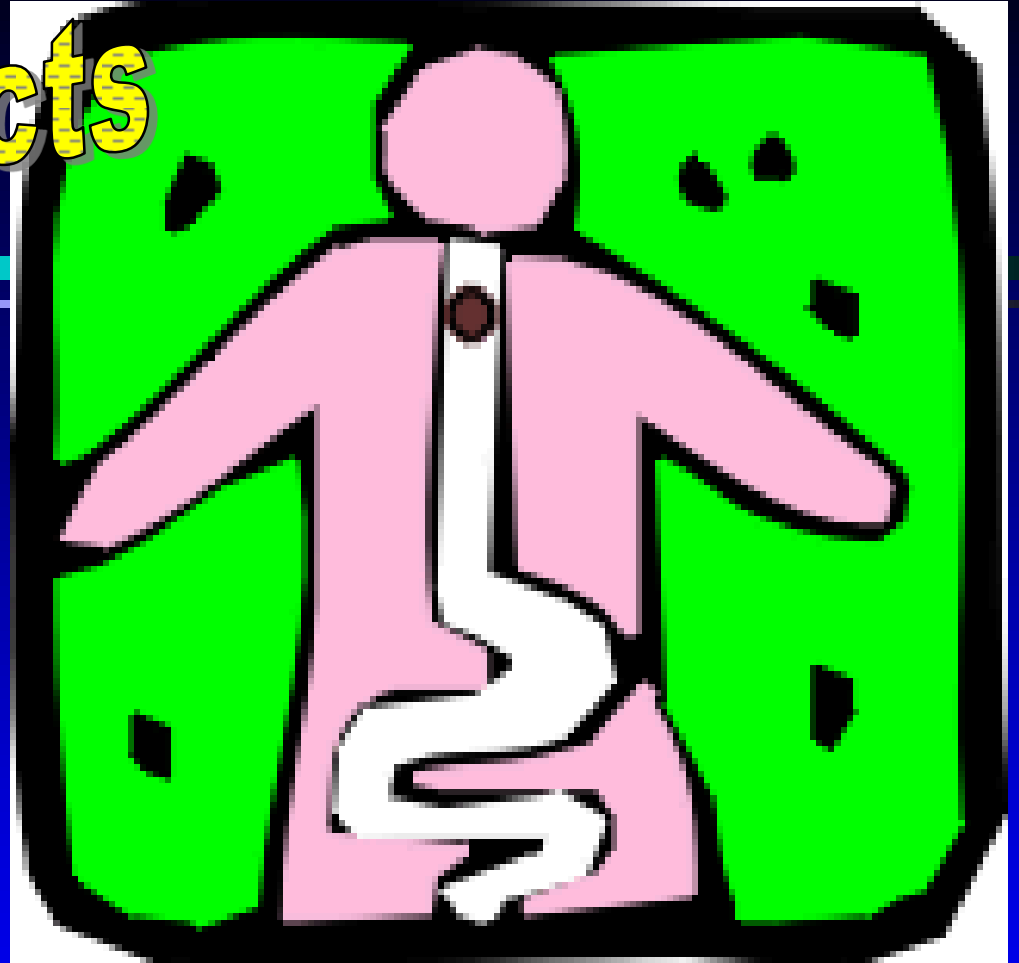


Kombinationen

The combination of opioids with anticonvulsants is beneficial.



Side effects



Adverse events can be a major problem and often lead to patients discontinuing medication in spite of pain relief.



Side effects

The most common are constipation, nausea, drowsiness, dizziness, pruritus,



with some patients reporting vomiting, headache, dry mouth and sweating.



Side effects



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



Side effects need to be managed aggressively.



„Constipation Ladder“



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



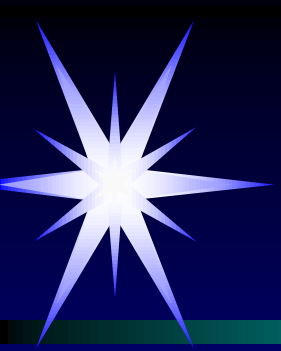
Tolerance occurs but can be treated by adjusting the dose appropriately.



Physical dependence



A withdrawal syndrome can be prevented by slow reduction of the dose.



Addiction



There is no proof that the addiction potential in pain patients is higher than in the general population.

Intravenous Opioid Test

Eur J Pain 9 : 123, 2005

- ❖ Begin Remifentanyl (Ultiva) 0.04 mcg/kg/min (150 mcg/h) and slow increase
- ❖ End: Pain reduction $> 50\%$, or VAS ≤ 3 , RR ≤ 7 , SaO₂ $\leq 85\%$, heavy sedation
- ❖ Responder or non responder
- ❖ Patient goes home after 1 hour



1. Case

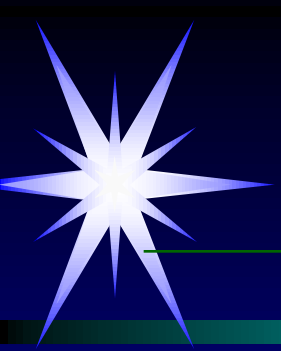
85 year old lady with back pain and osteoporosis

- 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

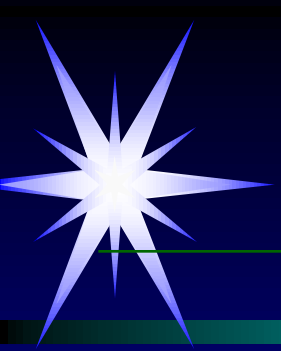
- Arrived to our pain unit with heavy pain, trembling and agitation. Medication: Fentanyl TTS 100 mcg/h every 3 days, Antiepileptics, antidepressants.
- Opioid rotation. Finally: Fentanyl TTS 25mcg/h every 2 days und Methadone 70mg/day.
- 60% less pain



Driving



- ❖ 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)



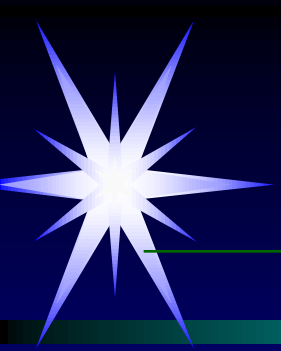
opioids

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
- ❖ Oxycontin liquid
- ❖ Hydromorphone Kps
- ❖ Actiq Lolli



10% of 24h dose: Cancer Pain: hourly

Non cancer: 3x/week



Guidelines



- ❖ Only one doctor should take responsibility for the treatment. He should be experienced in the treatment of pain and the use of opioids.



Guidelines



- ❖ Patients should be informed about the kind of treatment they receive and the potential side effects; they should give their consent to it.

Guidelines



- ❖ A treatment concept should be discussed; this should not be based on analgesia only.



Guidelines



- ❖ 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 intergration should be improved.



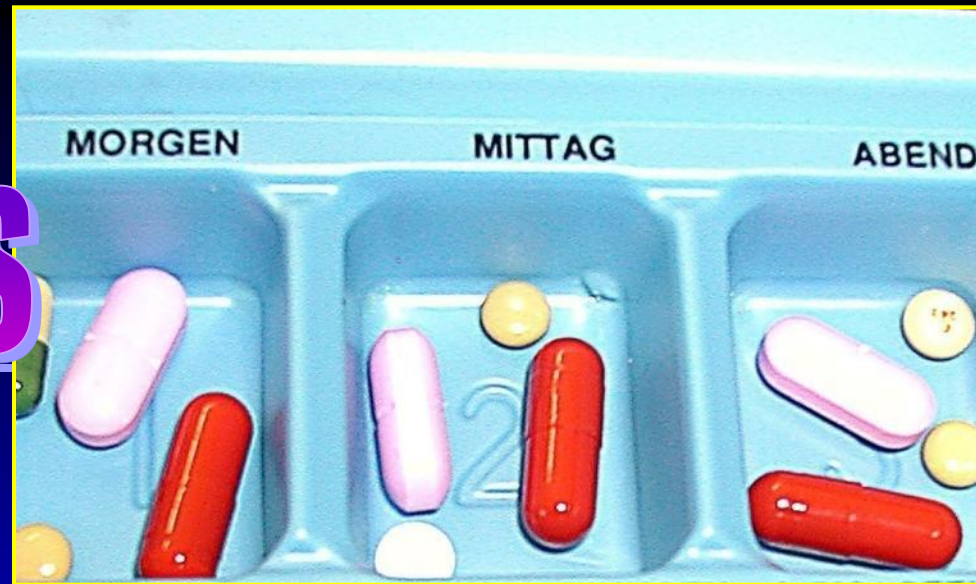
Guidelines



- ❖ A relative contraindication consists of anamnestically known addiction behaviour to one of the drugs.



Guidelines



- ❖ After choosing the opioid for the treatment and the administration modus, the drug should be prescribed on the clock and not on demand.



Guidelines



- ❖ In unusually high dose increases, the situation should be reviewed. The disease progress or other facts should be clarified.



Guidelines



- ❖ 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.



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Thank you

for your attention