

# Analgesics - seminar

dosage, adverse/side effects

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# Analgesics - case reports:

Describe in each prescription:

- Mechanism of Action of prescribed drugs
- **Indication for use / dosage**
- **Adverse / side effects**
- **Search for contraindications, interactions**
- **Any special precautions that should be taken**

# Analgesics:

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- What are the **types/groups of analgesics** you know?
  
- What is their mechanism of action?

# Paracetamol:

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- What is the most serious side effect of paracetamol?
- What is the **safe single/daily dose** of paracetamol?
- Against **fever/pain**. Is there any difference?

# Case report 1: adult man, 80kg

**Rp: Paralen tbl 10x500mg  
(paracetamole)**

**3x2 daily against pain**



- Is it the right dose? For what pain can we use it?
- Is this dosage associated with risk of overdose?
- Do you know medicines - combinations of paracetamol?
- How often can it be used? What is maximum daily dose?

# NDAIDs

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- For what **diseases** do we use non-steroid anti-inflammatory drugs?
- What kind of symptoms?

# NSAIDs - effects

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- Describe the two isoforms of cyclooxygenase:
- Constituent/induced - effects in the organism:

# Case report 2: Is it the right combination?

**Rp:**

**Aspirin 500mg**

(acetylosalicylic acid)

3x1 against pain

**Warfarin 5mg**

(warfarin)

1x1 according to INR





# Case report 3: What are the side effects of NSAIDs?

Rp:

**Diclofenac tbl 30x100mg**

Exp. Orig No II(duas)

**3x1 daily**

**Omeprazol TEVA 100x20mg**

Exp. Orig No II(duas)

**2x1**



# Case report 4: Is it appropriate combination of drugs?

Rp:

**Diclofenac tbl 30x100mg**

Exp. Orig No II(duas)

**3x1 daily**

**Prestance 90x10/10mg**

Exp. Orig No II(duas)

**1-0-0**



# Case report 5 (osteoarthritis):

Rp:

**Arcoxia 14x60mg**  
(etoricoxibe) 1x1 daily



**Concor COR 28x10mg**  
(bisoprolol)  
1-0-0 daily



# Case report 5 (osteoarthritis):

**Rp:**

What coxibes do we have on the market?

What is the route of administration?

What are the adverse effects of coxibes?

What are the contraindications of coxibes?



# Case report 6:

**Rp: Aulin tbl 30x100mg**

**Exp. Orig No III(tres)**

**(nimesulide)**

**3x1 daily**

**osteoarthritis**



# Case report 6:

**Rp: Aulin tbl 30x100mg**

**Exp. Orig No III(tres)**

(nimesulide)

3x1 daily

osteoarthritis



Is it the right dosage? What is the maximum daily dose?

What are the errors in this prescription?

What is the main side effect of nimesulide?

- What analgesics can be used during pregnancy?



# Opioids

- Which opioids are used to treat **postoperative pain**?
- What are the typical **side effects** of opioids?
- Which opioids are appropriate for **therapy of chronic pain** and why?
- What opioids are categorized as **weak opioids/strong opioids**?



# Case report 6: Low-back pain

**Rp: Tramal ret 10x100mg**

(tramadol)

**1x1 daily**

What is the maximum daily dose?

What is the mechanism of action?

What are the typical side effects of tramadol?

What are the typical combinations of tramadol in one tablet?

# Case report 7:

Rp:

**Durogesic emp 50ug/hod**

**Exp. Orig No II(duas)**

each 48hours

**Instanyl spray**

**Exp. Orig No II(duas)**

50ug/hod as requierd

# Case report 7:

**Rp:**

**Durogesic emp 50ug/hod**

**Exp. Orig No II(duas)**

each 48hours

**Instanyl spray**

**Exp. Orig No II(duas)**

50ug/hod as requierd

Dispensation minimum:

Is it the right dosage in this prescription?

What are the important information how to use transdermal systems and nasal spray with fentanyl?

# Neuropathic pain

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Can you give us **examples of neuropathic pain**?

**What drugs** are used for treating neuropathic pain?