

# EBMT ONLINE MEETING - HOW DO YOU DO IT.....?

## PAIN MANAGEMENT IN HCT

The meeting held on 10 June 2025 sought to empower nurses by promoting collaboration between centres and fostering networking for professional growth. It also aimed to compare nursing practices across Europe to better understand different approaches to care and to work towards standardising guidelines.

### FROM WHICH COUNTRY WERE THE PARTICIPANTS?



**Denmark, Germany, the UK, Italy, Finland, Spain and the Netherlands.**

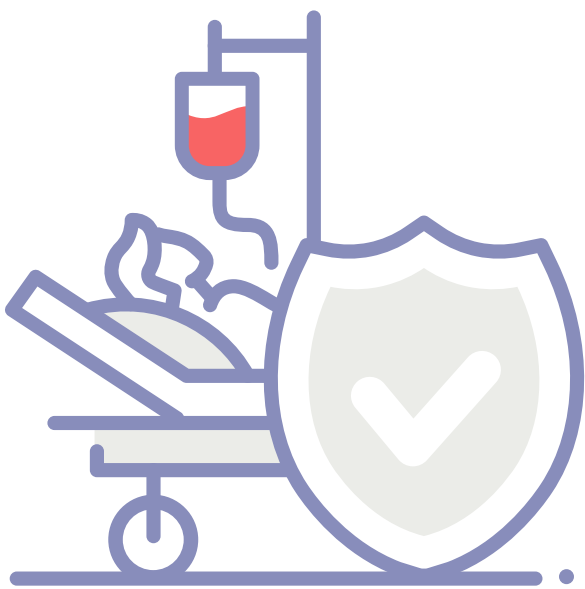
Total participants: **8 people**

### ON WHAT TOPICS DO YOU THINK WHEN WE TALK ABOUT PAIN MANAGEMENT IN HCT?

1. **Pain and HCT**
2. **Guidelines about pain management**
3. **Role of the nurse in pain management**
4. **Pain scales**
5. **What kind of pain medication is generally used**
6. **Alternative pain relief**



### 1) PAIN AND HCT



#### ***Nociceptive Pain***

Caused by tissue damage and activation of nociceptors (pain receptors). It is classified as:

- **Somatic pain:** Arises from damage to skin, connective tissue, muscles or bones. It is well localised and described as sharp, stinging or throbbing.
- **Visceral pain:** Results from injury to internal organs. It is poorly localised and often described as pressing, cramping or drilling.

**Treatment:** Often managed with paracetamol, NSAIDs or opioids.

#### ***Neuropathic Pain***

Results from damage to the peripheral or central nervous system.

- **Central:** e.g. following a stroke or in multiple sclerosis.
- **Peripheral:** e.g. diabetic neuropathy, trigeminal neuralgia, or medication-induced (e.g. ciclosporin).

**Symptoms** may include abnormal pain perception or hypersensitivity to non-painful stimuli, often described as burning, tingling, electric, stabbing or prickling.

**Treatment:** Typically with tricyclic antidepressants (TCAs) or antiepileptics.

Breakthrough Pain

A sudden, short-term flare-up of severe pain in patients with chronic pain. It may be nociceptive, neuropathic, or mixed.



Types include:

- **Spontaneous:** Occurs without an identifiable trigger.
- **Incident:** Triggered by movement or specific activity.
- **End-of-dose:** Arises before the next scheduled dose of analgesic.



**Mixed forms:** Combination of spontaneous and incident pain.



Pain After Amputation

May involve phantom limb pain and other complex mechanisms.

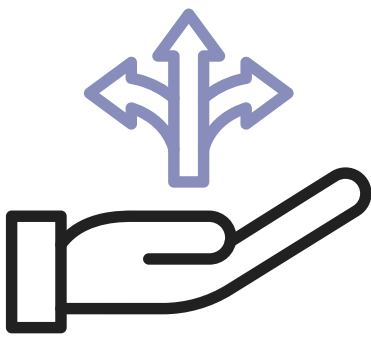
Bone Pain

Often caused by infiltration of bone marrow, e.g., by leukaemia cells.

2) GUIDELINES ABOUT PAIN MANAGEMENT

All hospitals have some form of **guideline** for managing pain in children who have undergone a haematopoietic cell transplantation (HCT).

These **guidelines** specifically outline the **types of pain** that may occur in children with cancer, the **pain scale** used, the **appropriate medication** for each situation, and the **possible side effects** of these medications.



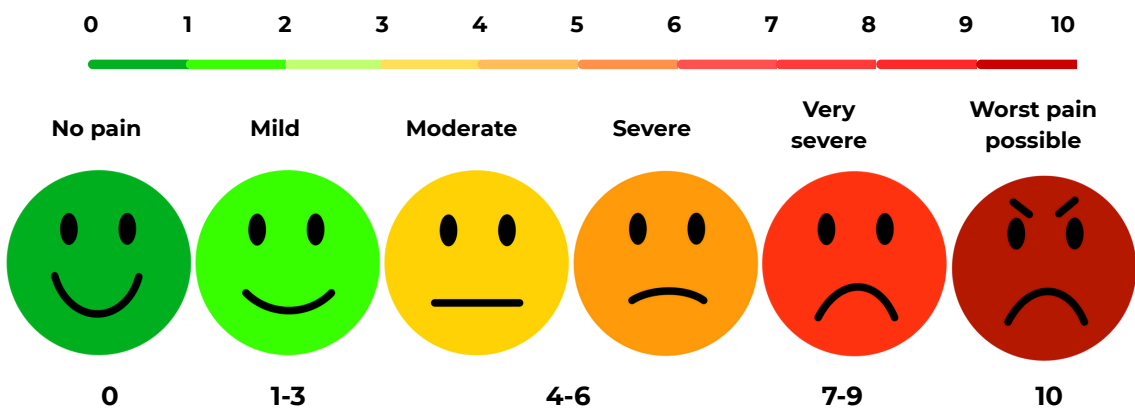
3) ROLE OF THE NURSE IN PAIN MANAGEMENT

One of the important **roles of the nurse** is to **assess pain** in children using an appropriate pain **assessment scale**. Nurses should **listen to both the child and the parent**, and **inform the doctor and/or the pain team**. In addition to providing medication and information about side effects, nurses should also offer other suitable methods of pain relief.

Most participating nurses indicated that their hospitals have a **pain team consisting of both doctors and nurses**. A few hospitals **do not have such a team**; in these cases, coordination and **decision-making are the responsibility of the doctors**.

3) PAIN SCALES

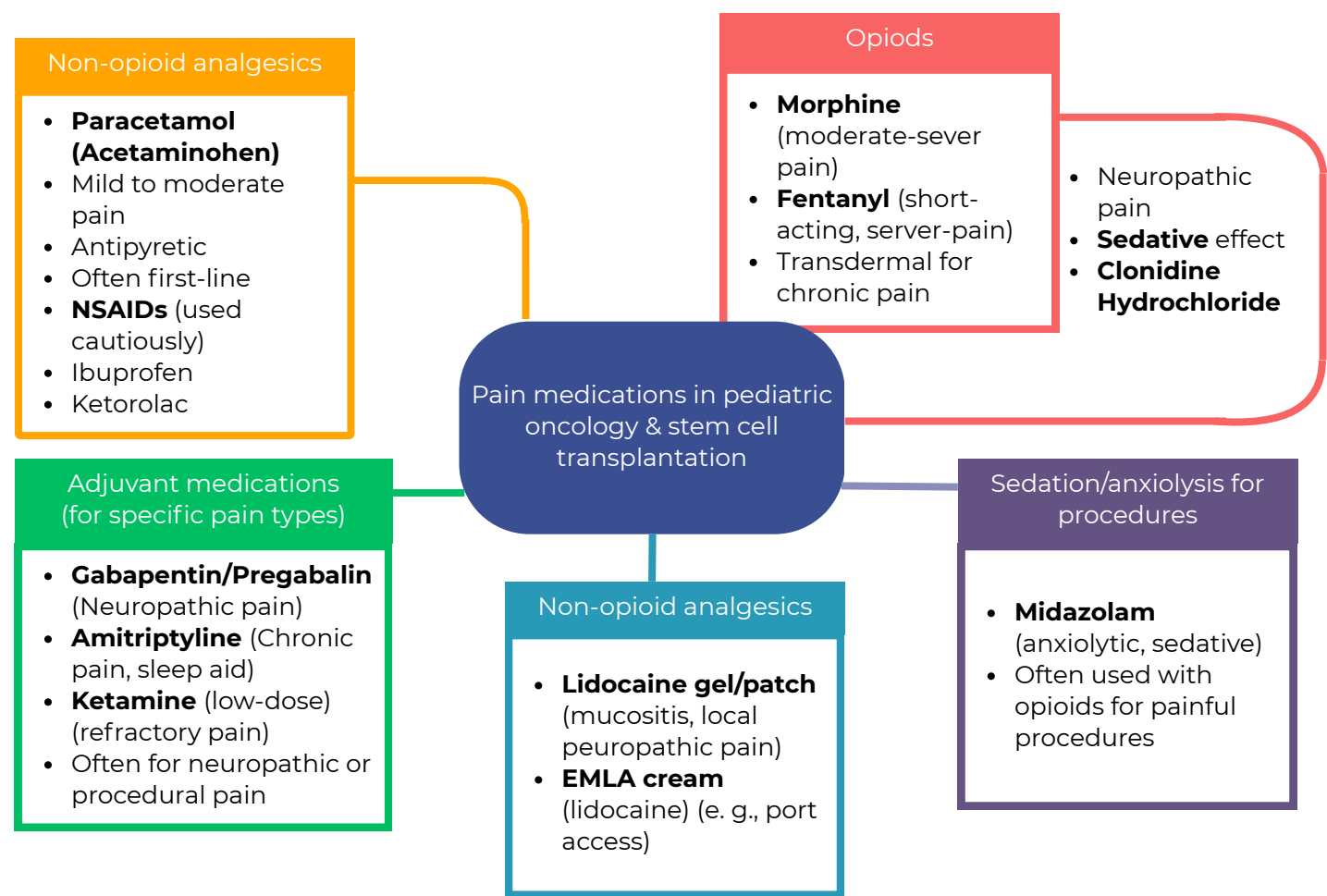
- 1.**FLACC Scale (Face, Legs, Activity, Cry, Consolability).** A behavioural assessment tool used for children (or adults) who are unable to verbally express their pain. It evaluates pain based on observable behaviours.
- 2.**NRS (Numerical Rating Scale).** A self-report measure was used with children aged 8 and above. They rate their pain on a scale from 0 to 10, where 0 indicates “no pain” and 10 represents “the worst pain imaginable”.
- 3.**VAS (Visual Analogue Scale).** Similar to the NRS, the VAS is used to assess pain intensity and often includes coloured “smiley faces” to help children visualise their pain levels. Categories are typically broken down as: 1–3: mild pain and 4–6: moderate to severe pain



**Others** that were mentioned include the **Wong-Baker FACES Pain Rating Scale**, which also uses facial expressions to help children communicate their pain levels. Similarly, the **Oucher Scale** features a photographic series of children's faces depicting varying degrees of pain. The **well-known WHO (World Health Organisation) pain ladder** was also cited, as well as the behavioural **KUSS scale**, used in Germany for young children aged ≤ 4 years.

## 4) WHAT KIND OF PAIN MEDICATION IS GENERALLY USED

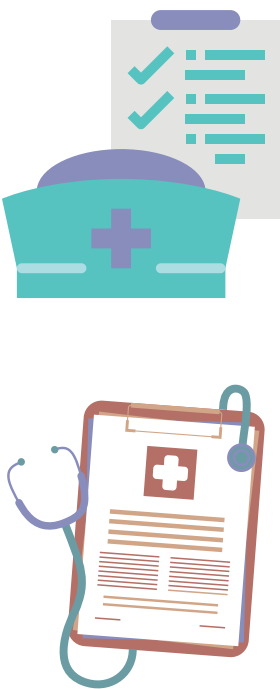
Participants reported that the most commonly used medications are **paracetamol** and **opioids** such as intravenous morphine, oramorph, or tramadol. Ketamine and clonidine are also used.



## 5) USE OF PATIENT/PARENT OR NURSE CONTROLLED ANALGESIA PUMP

**80%** of the nurses indicated that an **analgesia pump** is used in their hospital.

An interesting question that led to the discussion was the **duration of opioid use in teenagers and young adolescents**. How can the dosage be reduced after long-term use? What is the most effective approach? Experience shows that it is often difficult to taper the dosage, as patients become accustomed to the medication.



## 5) ALTERNATIVE PAIN RELIEF

- Virtual reality glasses
- Warmth (e.g., seed pillow, cuddle toy, hot water bottle)
- Cooling (e.g., ice lollies, ice flakes, or cool packs)
- Massage
- Distraction techniques (e.g. stories, creative activities, games, music)
- Mindfulness, where the child is guided to focus on something positive (e.g. “dream travel”)
- Photobiomodulation for oral mucositis
- Visits from family or friends