WG PTA: MUCOSITIS AND HAND-FOOT SYNDROME

(Zs. Órás)

1. Mucositis

1.1. Definition

Mucosal tissue/mucosa/ mucous membrane lines the insides of organs and cavities (gastrointestinal tract, respiratory and reproductive organs) that are exposed to outside particles and it protects them from abrasive particles, bodily fluids and invasive pathogens with secreting mucus. Mucositis is the inflammation of mucosa, when its rapidly dividing epitehlial cells break down due to chemotherapy agents and/or radiation used to treat cancer. The oral cavity is the most common location for mucositis. There are two main grading scales to assess severity (WHO, NCI).

1.2. Symptoms (oral mucositis)

- red, shiny, swollen mouth and gums
- sores (ulcers), blood blister in mouth, tongue or lips
- pain (can extremely stressful)
- bad breath
- infections (systemic as well)
- difficulties in swallowing, talking, etc.

1.3. Possible consequences

Dose reduction, postponement of the next cycle, fever, hospitalisation, wight loss, necessity for feeding tube, etc.

1.4. Prevention

- Good oral hygiene (mouth rinses, proper brushing)
- Avoid alcohol, smoking, irritating food (spicy, hot, acidic)
- Increasing fluid intake, foods high in protein, keep mouth moisturized
- Cryotherapy, growth factors, etc.

1.5. Treatment

1.5.1. Pain control

1.5.1.1. Mild: bland rinses

1.5.1.2. Moderate: topical anaesthetics (viscous lidocaine, not swallowed) and/or mouthwashes (morphine)

1.5.1.3. Severe: systemic analgesics

1.5.2. Corticosteroids (prednisone)

1.5.3. Nystatin

1.6. Not recommended interventions

Glutamine, sucralfate, chlorhexidine, ASA

2. Hand-foot syndrome (HFS)

2.1. Definiton

Hand-foot syndrome (HFS), also known as palmar-plantar erythrodysaesthesia (PPE), is a common side effect associated with a number of chemotherapeutic drugs including capecitabine, 5-FU, liposomal doxorubicin, idarubicin, docetaxel, paclitaxel, cytarabine, etoposide. A similar reaction, hand-foot skin reaction (HFSR) occurs with some kinase inhibitors e.g. lapatinib, pazopanib, sorafenib and sunitinib, axitinib, vemurafenib, regorafenib. It affects the palm of the hands and the soles of the feet often presenting on pressure bearing areas.

2.2. **Symptoms:** usually appear after 2-3 months, in targeted therapy within the first 6 weeks

- redness, swelling, tingling or burning sensation
- sensitivity to touch, numbness
- pain
- flaking or peeling of the skin
- thick calluses or blisters
- ulceration
- hyperpigmentation, pruritus, dry rash
- sensory impairment or paraesthesia

2.3. Toxicity grades

- Grade 1: minimal skin changes without pain
- Grade 2: skin changes (peeling, blister, edema) with pain
- Grade 3: severe skin changes (ulcerative dermatitis) with pain

2.4. Prevention

Emollient containing urea, premedication with oral/topical corticosteroid, avoiding exposure to heat and/or pressure, cooling, etc. (but: oral pyridoxine is ineffective)

2.5. Treatment

- Dose reduction and/or increasing the dosing interval
- Consider interrupting treatment
- Emollient with urea 10%
- Topical corticosteroids
- Systemic analgesics
- Referral to dermatologist