

## TRETINOIN

Most patients treated with Tretinoin will experience adverse effects, but the effects will differ from one patient to the next. Symptoms may indicate that the underlying cancer is not under control or has relapses. Cancer patients may also have co-morbid diseases that require treatment and cause symptoms.

The most common adverse effect with Tretinoin is hypervitaminosis A syndrome (including xeroderma, lip and mouth dryness, cheilitis, rash, edema, nausea, vomiting, and bone pain).

### **ADVERSE DRUG REACTION MANAGEMENT GUIDE**

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|------------------------------|--|
| 1. Pruritis                  | 5. General pain (headache, chest pain) |
| 2. Photosensitivity reaction | 6. Back pain                           |
| 3. Alopecia                  | 7. Fever                               |
| 4. Hyperhidrosis             | 8. Fatigue                             |

#### **1. Pruritis**

Pruritis (itchiness) may occur when taking Tretinoin, and usually happens because skin has lost its moisture.

**Prevention:** Preventing dry skin is the key to preventing pruritis. Advise your patients to:

- Use mild soaps that are deodorant and fragrance-free (e.g. Dove® or Neutrogena®)
- Apply lotions or bland emollients (Eucerin® cream, Neutrogena® Norwegian Formula Hand Cream, Vaseline Intensive Care® Advanced Healing Lotion) often.
- Use liquid shower gels in place of soap.

**Management:** For mild-moderate Pruritis, consider advising patients to:

- Apply more lotion than usual to help eliminate itchiness.
- Use lotions that contain aloe vera or dimethicone Moisturel®
- Use antidandruff shampoo and conditioner
- Use hair products that contain tea tree oil, which contain extra moisturizers and may help with symptoms

#### **2. Photosensitivity reaction**

Sunlight can cause sunburn reactions in patients treated with Tretinoin. Prevention is recommended to avoid these reactions.

**Prevention:** When patients begin therapy, advise them to AVOID sun exposure and:

- Use a broad-spectrum sunscreen (with an SPF of 30 or higher that protects against UVA rays and contains UVA filters) all day long, inside and outside. Wear protective clothing, including a hat, to cover the head, face, arms, legs, hands, and feet.
- Remind patients that UV rays go through glass (house, car windows, etc.).

### 3. Alopecia

Some patients will have hair loss while taking Tretinoin. Most patients will lose a minimal amount of hair on the oral form of this agent.

**Prevention:**

- Although there is no way to prevent hair loss, you may advise the patient that hair will usually regrow, once the treatments are over. The replacement hair may have a different colour or consistency.

**Management:**

- If hair loss bothers the patient, a wig, hat, cap, scarf or hair piece may be worn

### 4. Hyperhidrosis

Hyperhidrosis, or excessive sweating, can reduce quality of life for some patients. Sweating may be manageable for some patients by lifestyle options.

**Prevention:** Advise the patient to:

- Use strong antiperspirants (higher concentration of aluminum, e.g. DrySol 20% aluminum chloride)
- Bathe or shower with soap and water once or more daily
- Wear clothing from natural fibres- not synthetic fibres
- If scented products cause irritation, use unscented deodorant, soap and skin care products

**Management:**

- Systemic anticholinergics, e.g. oxybutinin, glycopyrrolate or propantheline bromide (prescription)

### 5. General pain (headache, chest pain)

Patients may experience other types of pain, such as headaches while on this treatment. Generalized pain may be a drug side effect or may be related to the cancer.

**Management:** The following may provide relief from headaches and other general pain problems:

- Mild pain may respond to non-pharmacologic approaches, such as rest, distraction, cool cloth on the forehead
- Mild pain medications- Acetaminophen preferred; do NOT use non-steroidal anti-inflammatory agents, prescription or OTC due to risk of bleeding (e.g. ibuprofen, ASA, naproxen)
- Acetaminophen with codeine, either OTC (low dose) or on prescription (higher dose) may be considered for more severe pain.
- If acetaminophen is not sufficient to control pain, consider prescription opioid analgesics for management of more severe pain (possibly due to tumor)
- If there is a neuropathic component to the pain, consider a trial with a tricyclic antidepressant (e.g. low dose amitriptyline or imipramine) or gabapentin

## 6. Back pain

Back pain can occur in patients taking Tretinoin. Bone and joint pain may show up in the back or extremities (hands and feet).

**Management:** The following may provide relief from muscle aches or cramps:

- Mild pain medications- Acetaminophen preferred; do NOT use non-steroidal anti-inflammatory agents, prescription or OTC due to risk of bleeding (e.g. ibuprofen, ASA, naproxen)
- For joint pain, consider the use of heating pads, ice packs, or topical arthritis creams and liniments
- Mild exercise and/or massage therapy may help reduce joint pain
  - Use of a muscle relaxant may be considered (e.g. cyclobenzaprine- prescription, or acetaminophen/methocarbamol combinations-OTC)

## 7. Fever

Fever, or increased body temperature, may occur with this drug. While fever is uncomfortable, be careful if the patient is at risk of febrile neutropenia from the drug. Reducing fever can mask the symptoms of emergent infection and cause a delay in management of this potentially life-threatening problem.

**Management:** The following may provide relief from headaches and other general pain problems:

- Non-pharmacologic approaches, such as a sponge bath with tepid water, or a cool cloth on the forehead, may provide some relief from fever
- Antipyretics- Acetaminophen preferred; do NOT use non-steroidal anti-inflammatory agents, prescription or OTC due to risk of bleeding (e.g. ibuprofen, ASA, naproxen)

## 8. Fatigue

Some patients on Tretinoin will experience fatigue. This symptom is not life-threatening but will significantly reduce quality of life.

**Management:** The following may provide relief from fatigue:

- There are no medications that have demonstrated an effect to relieve fatigue
- Mild exercise is very helpful to reduce fatigue, but must be manageable if there is also muscle weakness

### REFERENCES:

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Systemic Therapy Manual for Cancer Treatment, Cancer Care Nova Scotia, 2013

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Therapeutic Choices, Sixth Edition, Canadian Pharmaceutical Association , 2011