

Efudex (Topical 5-fluorouracil;5-FU):

Indications for use

- Actinic (Solar) Keratosis – treatment of single lesions and field treatment
- Bowen's disease (SCC in situ)

Mechanism of action

Fluorouracil is a pyrimidine antimetabolite which interferes with DNA synthesis by blocking the methylation of deoxyuridylic acid to thymidylic acid. It blocks DNA synthesis preventing cell proliferation of fast growing cells leading to cell death.

Advice and caveats

- 5-FU is contraindicated in patients with a DPD (dihydropyrimidine dehydrogenase) deficiency, with a known hypersensitivity and during pregnancy and breastfeeding
- Total area of skin to be treated at a time should not exceed 500 cm²
- The usual pattern of response is the following: redness, blistering, erosion, ulceration and re-epithelialisation (new skin cells forming)
- A temporary unsightly appearance and local discomfort is normal with this drug
- Adverse effects could include pain, pruritis, hyper- or hypopigmentation and a burning sensation. Also, local dermatitis, scarring (rare), soreness and tenderness
- If there are other inflammatory conditions e.g. rosacea or melasma it could be worsened during the treatment period and these conditions should preferably be treated before commencing treatment with 5-FU

Instructions

- Avoid contact with eyes or mucous membranes due to its irritant nature
- Apply Efudex with a glove or metal applicator or wash hands thoroughly after application
- Avoid sun exposure during the treatment period as severe sun sensitivity can occur in the areas of application
- Avoid cosmetics and other topical medication (except moisturizers) in the treated areas
- Directions for use: for treatment of single lesions apply a thin layer to the affected area. For field treatment, apply to the area as directed. Application is usually twice a day. The area is washed and dried and after 10 minutes the Efudex is re-applied. Continue application for 2-4 weeks or until superficial erosion occurs. In the case of SCC in situ apply for 6 weeks.
- Wash the skin with a neutral cleanser twice a day and apply moisturizers regularly

Follow-up

- If there is any concern during the treatment period stop the medication and phone in to the office or come in person
- It is advised to make a follow up appointment for 2 weeks after initiating treatment to oversee their progress
- After that, 8-12 weeks following treatment is a good time period to assess response to treatment

References:

1. Jansen MHE, Kessels JPHM, Nelemans PJ et al, Randomized trial of four treatment approaches for Actinic Keratosis. N Eng J Med 2019; 380:935-46.
2. Fluorouracil (topical): Drug Information Lexicomp. Uptodate Online.