www.bpac.org.nz keyword: imiquimod

Imiquimod cream (Aldara) for genital warts and basal cell carcinoma

Imiquimod cream is now funded on special authority for the treatment of genital warts and superficial basal cell carcinoma

The special authority criteria are:

Either:

1. The patient has external anogenital warts and podophyllotoxin has been tried and failed (or is contraindicated); or
2. The patient has external anogenital warts and podophyllotoxin is unable to be applied accurately to the site; or
3. The patient has confirmed superficial basal cell carcinoma where other standard treatments, including surgical excision, are contraindicated or inappropriate.

Imiquimod is an immune response modifier

Imiquimod enhances the immune response to viral infections and tumours by stimulating the immune system to release interferon and other cytokines.[1]

Therapeutic uses of imiquimod

Imiquimod is registered for use in the following conditions[2]:

- Superficial basal cell carcinoma
- External genital warts
- Actinic keratosis (also known as solar keratosis)*

*** Although registered for use imiquimod is not funded for this indication.**

Superficial basal cell carcinoma

Surgical excision remains the first line therapy for superficial basal cell carcinoma. It has a higher cure rate than imiquimod and allows histological assessment of tumour clearance.[3]

Imiquimod may be useful when surgery is contraindicated. Patients must be willing to follow the six week course

Table 1. Dosing for imiquimod cream[2]

- Imiquimod cream should be applied with the fingertip and rubbed into the affected area until the cream vanishes
- Wash hands before and after application
- The treatment should be washed off with mild soap and water after six to ten hours
- Local inflammatory reactions may occur. If severe, stop treatment for a few days and then resume once the reaction subsides. Rest periods are considered part of the treatment and the treatment period does not need to be extended to make up for missed doses
- Each condition has a different dosing frequency:

Condition	Dose	Comment
Superficial basal cell carcinoma	The patient should apply imiquimod cream once daily at bedtime for five consecutive days per week (e.g. Monday to Friday) for six weeks.	Sufficient cream should be applied to cover the area and 1cm of skin surrounding the lesion
Genital warts	The patient should apply imiquimod cream once daily at bedtime, three times a week (e.g. Monday, Wednesday, Friday) until the warts have resolved or up to a maximum of 16 weeks.	Imiquimod cream can weaken latex condoms and reduce their barrier function. Avoid use prior to sexual activity.
Actinic keratosis	Imiquimod cream should be applied once daily, two times per week.	Imiquimod is not funded for this indication

Tip: While the manufacturer states that the sachet is for single use only, sachets are commonly used for more than one application. The sachet can be sealed using a paper clip or tape and stored in a closed container to prevent the cream drying out.[5, 6]

of therapy and tolerate the possible adverse skin reactions.[3]

Imiquimod is not suitable for use within 1cm of the hairline, eyes, nose, mouth or ears, because tumours in these areas are less likely to be superficial and there is a greater risk of hard-to-manage recurrence.[3]

Imiquimod is not indicated for recurrent, invasive, infiltrating, or nodular basal cell carcinoma.

Dosing instructions are explained in Table 1.

External genital warts

Treatment choice for genital warts needs to be considered on an individual basis. There is no definitive evidence that one treatment is better than others and no single treatment is suitable for all patients or all warts.[4] The method of treatment may be largely decided based on patient preference. Other factors include the size, number and site of the warts.

Commonly used patient-applied treatments in primary care are podophyllotoxin and imiquimod. Cryotherapy is also commonly used in general practice.

Podophyllotoxin is suitable for external warts that can be visualised by the patient. It is more difficult to use safely on genital warts in females and perianal warts as inadvertent application to other areas may cause significant skin irritation.[4]

While imiquimod requires careful application, it causes minimal irritation, so inadvertent application to surrounding skin should not cause significant problems.[5]

Neither podophyllotoxin nor imiquimod are suitable for use in pregnancy.

Dosing instructions are explained in Table 1.

Actinic keratosis

Imiquimod cream is one treatment option for actinic keratosis, but is not funded for this indication. Other treatments include cryotherapy, curettage and cautery, excision, and 5-fluorouracil cream.

Dosing instructions are explained in Table 1.

Adverse effects

Many adverse effects associated with imiquimod cream are the result of its therapeutic action.[2]

Local skin reactions are common

Inflammation in areas treated with imiquimod cream is expected as part of the treatment process. Effects may include itching, burning, redness, scabbing, flaking, pain and ulceration. Increasing severity of these reactions may be associated with higher clearance rates of skin lesions.

Systemic adverse effects and skin pigmentation changes have been reported

Topical imiquimod can cause intense local inflammatory reactions. These rare reactions are often accompanied or preceded by flu-like systemic symptoms such as malaise, pyrexia and nausea. Treatment may need to be interrupted.[7, 8] Mild symptoms can be treated with paracetamol.[3, 6]

Permanent localised hypo- or hyper- pigmentation has been reported.[8]

References:

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3. NPS. Imiquimod cream (Aldara) for superficial basal cell carcinoma. NPS Radar December 2006. Available from: http://www.nps.org.au/ (Accessed September 2008).
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5. Edwards L, Ferenczy A, Eron L, et al. Self-administered topical 5% imiquimod cream for external anogenital warts. Arch Dermatol 1998; 134: 25-30.
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