



SKIN CANCER (OTHER THAN MELANOMA)

TOPICAL THERAPY FOR SKIN CANCER IN SOLID ORGAN TRANSPLANT RECIPIENTS

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In addition to established risk factors for cutaneous squamous cell carcinoma (cSCC) in solid organ transplant recipients (SOTR) – age, gender, skin type, duration immunosuppression, organ-specific factors - the number and type of actinic keratoses (AK) and the presence of field cancerisation (FC) will also predict risk for subsequent cSCC [Wallingford et al, 2015]. Recent ultra-deep sequencing and next generation sequencing studies have explained field cancerisation by showing that sun-damaged epidermis contains many clones of cells with genetic (driver) mutations, including clones with multiple mutations [Martincorena et al, 2015; Albibas et al, 2018].

Therapy for AKs is generally directed at treating both individual AK and surrounding FC, with the rationale that this should reduce the risk of future cSCC in the treated field [Stockfleth et al, 2017; Weinstock et al, 2018]. Licensed topical treatments include 5-fluorouracil, imiquimod, diclofenac, ingenol mebutate and photodynamic therapy (PDT). A Cochrane review on interventions for AKs concluded that for field-directed treatments, direct comparisons between these treatments are needed to determine the best therapeutic approach [Gupta et al, 2012]. While patients are willing to use field treatment, this can result in considerable inflammation and pain from a local skin reaction, and a multi-database literature review noted that non-adherence and non-persistence with topical AK therapies ranged from 10–63% and 23–31%, respectively [Foley et al, 2016]. A discrete choice experiment found that SOTR appreciated the importance of reducing skin cancer risk more than immunocompetent individuals [Kopasker et al, 2018]. Weinstock and colleagues found a 75% risk reduction in number of cSCCs at 12 months following field treatment with 5-fluorouracil in the immunocompetent population [Weinstock et al, 2018]. This has yet to be shown in SOTR. PDT and daylight PDT are promising modalities for field treatment and are increasingly used in immunosuppressed patients.

