

Managing and preventing effects of anticancer drugs on the skin.

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Received: 31-Dec-2021, Manuscript No. AARCD-22-53977; Editor assigned: 02-Jan-2022, PreQC No. AARCD-22-53977(PQ); Reviewed: 15-Jan-2022, QC No AARCD-22-53977; Revised: 20-Jan-2022, Manuscript No. AARCD-22-53977(R); Published: 27-Jan-2022, DOI:10.35841/aarcd-5.1.102

Abstract

The skin, its appendages, hair, and nails all play a role in overall health, appearance, and self-esteem. In cancer patients, these dermatological structures may be altered as a result of the disease (i.e. paraneoplastic dermatoses), as part of inherited cancer syndromes, or as a result of anticancer therapies such as systemic drugs, therapeutic transplantation, radiotherapy, and surgery. Systemic therapies are used in about 65 percent of all cancer patients, with cytotoxic chemotherapies, immunotherapies, biologics, targeted therapies, and endocrine drugs being the most commonly associated with dermatological side effects.

Keywords: Antiepileptic, Neurokinin-1, Oral Corticosteroids, Antihistamines.

Introduction

The frequency of dermatological side effects will vary depending on the exact treatment used and, less commonly, the type of tumour. Toxicities resulted from chemotherapies. These occurrences are noteworthy because they have a psychosocial impact, as well as morbid and financial implications, and may result in the cessation or discontinuation of systemic antineoplastic therapy. Despite the fact that most dermatological AEs are classed as grade 1 or 2, their chronicity, presence on cosmetically sensitive areas, and correlation with pruritus and pain symptoms necessitate the use of preventative or reactive therapy. Indeed, the unfavourable impact of dermatological adverse events from targeted therapies on quality of life is enormous, even greater than the impact of dermatological adverse events from cytotoxic medicines. As a result of the acneiform rash caused by epidermal growth factor receptor inhibitors, 76 percent and 32 percent of oncologists have reported dose interruptions and discontinuations, respectively [1].

Chemical stress and the usage of alcohol-free skin moisturisers are two general preventive measures (skin irritants, solvents or disinfectants). Any predisposing cause should be treated before starting therapy, hence a podiatric or foot care professional evaluation is recommended. In patients treated with sorafenib, urea emollients dramatically reduced the incidence of all-grade HFSR, delayed the time to first occurrence, and improved quality of life, and are thus recommended. In the case of hand-foot syndrome, urea emollients are also advised [2].

Antiepileptic drugs like pregabalin and gabapentin have been observed to relieve pruritus in the general population. Pregabalin is thought to reduce pruritus at the peripheral level by inhibiting the production of calcitonin gene-related peptide,

which causes itching in the periphery, as well as at the central level by modulating μ -opioid receptors. Data on Epidermal Growth Factor Receptor Inhibitors-associated pruritus, on the other hand, is based on tiny case series. Antiepileptic medications should only be used as a last resort in patients who have failed antihistamines and therapy for underlying rash and xerosis but still have clinically significant pruritus, according to these guidelines [3].

In both topical and oral forms, the tricyclic antidepressant doxepin, which is also a powerful histamine blocker, has been used to treat general pruritus. Aprepitant, a neurokinin-1 receptor antagonist, has been shown to alleviate pruritus caused by erlotinib, cetuximab, panitumumab, sunitinib, gefitinib, imatinib, and other EGF receptor inhibitors. Furthermore, in an instance of nivolumab-related refractory pruritus, aprepitant improved the condition. Systemic corticosteroids may be helpful in relieving especially acute itching for a short time. Oral corticosteroids or immunosuppressive medication may be prescribed for severe or widespread itching[4].

References

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Citation: George C; Managing and preventing the effects of anticancer drugs on the skin. *Res Clin Dermatol.* 2022;5(1):102

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