



Toxic erythema induced by capecitabine: a case report

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Introduction: Toxic erythema of chemotherapy is a adverse effect of chemotherapy. It is a general term that encompasses hand-foot syndrome, palmar-plantar erythrodysesthesia, and eccrine syringometaplasia¹⁻⁶. TEC also has a clinical spectrum with variants that range from mild palmer erythema to systemically morbid capillary leak syndrome^{7,8}. We are here presenting a case of TEC induced by capecitabine.

Case report: Our patient, 68 years old male with rectal carcinoma presented with hyper-pigmentation over face, neck, hands and feet 10 days after he was started on capecitabine. Initially patient developed tingling sensation over face and hands, which progressed to burning sensation. This was followed by discomfort, pain and stiffness. This was accompanied by thickening and pigmentation of skin over face, neck, hands including palmer surface and feet and soles. At the time patient presented to us he had desquamation over lesions. There was no mucosal or nail involvement. Patient refused a biopsy for histopathological examination and was diagnosed on the basis of history and clinical examination. Patient was given emollient cream; containing white soft paraffin and liquid paraffin along with oral pyridoxine 40 mg daily.



- Patient having desquamation over face with hyperpigmentation involving face and v area of neck.
- Involvement of dorsum of hands in form of hyperpigmentation, edema and scaling.
- Palmar involvement in form of pigmentation, scaling and thickening of skin

Discussion: TEC is a cutaneous toxic reaction to several chemotherapeutic drugs, and is characterized by symmetrically distributed erythema, edema with or without blisters, and erosions over palms and soles.

Most common drugs implicated are pegylated doxorubicin, capecitabine, 5 fluorouracil, cytarabine, docetaxel, sorafenib, and sunitinib^{9,10}.

It is suggested that the reaction is due to the accumulation of large quantities of the drug in the stratum corneum of the palms and soles, which lack sebaceous glands and have a large number of eccrine glands. This allows local injury due to the toxic accumulation of the drug. However, this has not been proved¹¹.

Some cases may be accompanied by nail changes such as onycholysis and nail discoloration. Nail disorders are reported in less than 5% of patients receiving capecitabine alone and in about 15% of patients receiving either capecitabine and docetaxel or docetaxel alone for metastatic breast cancer¹².

The histopathological findings are nonspecific, with mild focal spongiosis in the epidermis, mild epidermal atypia, and mononuclear cell infiltration of the upper dermis¹¹.

Acral erythema may also be seen in acute graft-versus-host disease and severe liver disease¹¹. But in GVHD it may progress to generalize maculo-papular rash with systemic symptoms such as diarrhea and liver abnormalities.

Simple topical care with wet dressings, topical steroids and emollients is all that is required to clear the condition in some patients, without interrupting therapy. In some patients reduction of dose of offending drug may be needed and in severe cases offending agent needs to be stopped to avoid worsening of condition. Oral pyridoxine has been used with some success in some patients¹³.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest:

There are no conflicts of interest.

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