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Photo Clinic

# Cytarabine Induced Palmar Erythrodysesthesia in a Case of Lymphoma

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A 22-year-old female, a case of precursor T-Cell lymphoblastic lymphoma was admitted to receive Hyper-CVAD chemotherapy COURSE 1B (continuous intravenous infusion of methotrexate (MTX) 1000 mg/m$^2$ with leucovorin rescue and high dose cytarabine (4400 mg, over 2 hours, q12 hour on days 2, 3) in a sun protected dark, clean room. She had also received Hyper-CVAD regimen COURSE 1A about a month ago without any serious complication. One day after completion of cytarabine, she developed bilateral palmar erythrodysesthesia (Figure 1).

Treatment with olive oil, oral hydroxyzine along with dexamethasone was initiated. Palmar pain and edema was markedly diminished after 12 hours; whereas erythema took about one week to resolve.

Palmar-plantar erythrodysesthesia or hand-foot syndrome is chemotherapy induced acral erythema, swelling, numbness and desquamation of palms and soles that can occur after chemotherapy. Acral erythema typically disappears within a few weeks after discontinuation of the offending drug.[1, 2]

Hand-foot syndrome has been reported in 6-42% of patients treated with systemic chemotherapeutic agents such as 5-fluorouracil and its analoges, doxorubicin, cytarabine, cyclophosphamide, vinorelbine and those treated with targeted therapies such as sorafenib and sunitinib.[3-8]

Ankur Jain et al. reported cytarabine induced acral erythema in a case of mantle cell lymphoma who was treated with oral pyridoxine (100 mg per day), hydroxyzine (25 mg thrice daily) and cold compression of palms which subsided with occurrence of desquamation over 7 days.[9]

Various supportive modalities including limitation of the use of hot water over hands and feet, having cool showers, avoiding heat including saunas and suntan, administration of pyridoxine, hydroxyzine, topical anti-inflammatory

**Figure 1:** Swelling and erythema of palm.

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medications such as corticosteroids, topical pain relievers such as lidocaine, topical moisturizing exfoliant creams and topical Dimethyl-sulfoxide (DMSO) have been recommended for the treatment of chemotherapy induced hand-foot syndrome in the literature.[9-12]

**Conflict of Interest:** None declared.

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