

Hand- Foot Syndrome And Cutaneous Reactions Following First Dose Of Chemotherapy

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Citation

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Abstract

Sir,

A 63-year-old female with stage IIIA breast cancer was treated in our department with adjuvant chemotherapy containing 5- fluoruracil, epirubicin and cyclophosphamide. Clinical and anamnetic findings revealed no signs of any disorder and physical examination was unremarkable. The patient received, 5- fluoruracil 720 mg/m^2 , epirubicin 145 mg/m^2 and cyclophosphamide 720 mg/m^2 administered as a infusion on day one, repeated every three weeks. Treatment given on day 1 was preceded by dexametasone 4 mg i.v. and granisetron 3 mg i.v. for the prophylaxis of nausea and vomiting. The same anti-emetic treatment was repeated i.v. on day 2 and orally on days 3 and 4. The first treatment cycle was uneventful. Four days after administration of the second cycle the patient was admitted to our clinic with hand-foot syndrome (HFS), associated with nail changes on hand (hyperpigmentation) and maculopapular eruptions on the trunk (Figure 1,2,3,4 and 5).

Figure 1

Figure 1: Macroscopic appearance of nail changes



Figure 2

Figure 2: Cyanosis of the nail.



In our case, HFS was associated cutaneous reactions which progress to the body of the patient. After the first episode of HFS, interruption of therapy was necessary. The patient was used pyridoxine with dose of 100mg /d. and local therapy with cooling hand and foot baths. Chemotherapy was restarted according to the original scheme after 2 weeks.

Figure 3

Figure 3: Palmar desquamations



Figure 4

Figure 4 Skin desquamation after first dose of chemotherapy



Figure 5

Figure 5. Maculopapular eruptions on the trunk



Palmar-Plantar Erythrodysesthesia, also called hand-foot syndrome is a side-effect of chemotherapy or biologic drugs used to treat cancer. It results following administration of chemotherapy leak out of small amounts of drug from capillaries in the palms of the hands and soles of the feet. Exposure of the hands and feet to heat or friction increases the drug leakage from the capillaries. This leakage of drug results in redness, tenderness, peeling and numbness. HFS occurs most frequently in therapy with 5-Fluoruracil (5-FU), capecitabine ,vinorelbin, continuous-infusion doxorubicin, docetaxel and high-dose Interleukin-2. There is no evidence in the literature that HFS prefers a race or population group. Palmoplantar erythemas of other origins are common and differential diagnosis must be done from that they not become worse with chemotherapy and they exist prior the chemotherapy. Contact eczema, allergic contact and drug-induced eczemas, Hand-Foot-Mouth disease, sickle-cell anemia,eritema multiforme must be added to the differential diagnostic considerations.The approaches to managing hand-foot syndrome is include pyridoxine(vitamin B6), corticosteroids and dimethyl-sulfoxide (DMSO),avoid exercise, manuel labor,and to contact with the hot water.

References

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