Cytosine Arabinoside Induced Papular Purpuric Eruption

Sitozin Arabinozide Bağlı Gelişen Papüler Purpurik Döküntü

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Cytosine arabinoside is a pyrimidine antagonist used in the treatment of hematological malignancies. Particularly, when ARA-C is given in high doses, it provokes various adverse effects, including fever, severe myelosupression, infection and toxic reactions involving the central nervous system, liver, gastrointestinal tract, eyes and skin. Dermatologic side effects of cytosine arabinoside therapy are often described as rare. Nevertheless, there are differences in the observed frequency of toxic skin events ranging from 2% to 53%. Moreover, idarubicine and etoposide are very rarely associated with adverse skin reactions.[1,2]

The skin changes, including mild acral erithema, tender erithematous plaques on the palms and soles, papular purpuric eruptions, erithematous urticarial plaques, bullous and acral erythema, rarely vasculitis are dose related and they usually resolve without medical intervention when ARA-C therapy is discontinued. The most commonly observed reactions are morbilliform eruptions and acral erythema, although severe reactions with swelling and generalized urticaria can be observed in some cases, and less commonly ecrine changes, including neutrophilic ecrine hidradenitis and ecrine squamous syringometaplasia can occur. In addition, a syndrome comprising fever, malasie, arthralgia and maculopapular exanthema has also been described.[3] Vasculitis is a rare side effect.[4]

The application of topical steroids, cold compresses, analgesics, antihistamines, pyridoxine or short course of corticosteroids can be used to ameliorate the symptoms, but most of skin reactions cleared spontaneously without requiring treatment.[1] We administered antihistamines and the patient's skin eruption disappeared slowly over two weeks. Re-administration of the drug does not provoke the same eruption in all the patients who have a positive reaction to the first cycle of ARA-C.[5,6] Similarly, during the other

courses of ARA-C, the patient did not have any skin changes.

Infectious related papular purpuric exanthems should also be considered in any cancer patient receiving chemotherapy. For example, cytomegalovirus infections can be presented with petechiae and purpura, while the papular-purpuric gloves and socks syndrome (PPGSS) characterized by focal acral purpuric eruptions with a symmetrical distribution, is a rare but representative purpuric dermatosis closely associated with parvovirus B19 (PVB19). However, several atypical presentations and generalized involvement of the body have been recently reported in PVB19 infected patients. Rare triggers of PPGSS may include coxsackie, cytomegalo, measles, hepatitis B or Epstein-Barr viruses. Such multifaceted features can cause considerable confusion when making a differential diagnosis of papular purpuric eruption in cancer patients.[7,8]

In the treatment of hematologic malignancies with ARA-C, patients should be followed carefully for possible cutaneous side effects which are mostly self limiting and requiring symptomatic and supportive treatment. Vasculitis and infectious eruptions especially caused by viruses should be considered in differential diagnosis of papular purpuric skin eruptions.

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