CORRESPONDENCE

Recurrent Sweet's Syndrome in a Case of AML

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A 52-years-old lady was incidentally detected to have pancytopenia during in-hospital evaluation of unexplained fever. On evaluation, she was diagnosed as cytogenetically normal acute myeloid leukaemia (AML) with maturation (FLT3/ITD, NPM1 mutation positive). She was managed with decitabine @ 20 mg/m²/day for 5 days.

She developed skin lesions on day 2 of therapy over the arms/trunk (Fig. 1a–d). The skin biopsy of the lesions was suggestive of Sweet's syndrome (Fig. 2). She was initially managed with Prednisolone 1 mg/kg/day for 1 week with only partial improvement, followed by intravenous immunoglobulins (IVIG—2 g/kg over 2 days) with resolution of lesions (Fig. 3a–d). Within 2 months the patient developed recurrence of similar lesions on face/arms (Fig. 4). AML was in remission with no evidence of relapse/progression at the time of reappearance of skin lesions. Repeat biopsy of the lesions again diagnosed as

Sweet's syndrome (Fig. 5), which was re-treated with IVIG (2 g/kg over 2 days) following which her lesions remitted (Fig. 6).

Sweet's syndrome, also known as acute febrile neutrophilic dermatosis occurs in three forms: classical, malignancy-associated and drug-related. Malignancy associated Sweet's syndrome may occur in one of the three settings, either as paraneoplastic syndrome or drug-induced dermatosis (ATRA/bortezomib/Cytarabine/G-CSF/imasitinib) or concurrently with leukaemia cutis [1]. AML and MDS are common hematological disorders associated with Sweet's syndrome. Recurrence is commonly seen in MDS (particularly lymphocytic variant) and when seen in AML, it temporally relates to relapse/progression [1, 2]. Management includes treating the underlying cause, systemic steroids (Ist line agents) or indomethacin, clofazamine, dapsone and cyclosporine (IIInd line agents) [3].

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Fig. 1 a–d Skin lesions over the face and arms

Fig. 2 Haematoxylin and Eosin stain of skin biopsy suggestive of neutrophilic dermatosis ($\times 40$)

In our case interestingly, recurrence of Sweet's syndrome was neither secondary to progression nor relapse of AML. We reemphasise role of IVIG in refractory/relapsed Sweet's syndrome

Learning Points

- Malignancy associated Sweet's syndrome in haematology is commonly associated with AML, MDS.
- Recurrent Sweet's syndrome is a feature of myelodysplasia.
- IVIG is one of the treatment options to recalcitrant Sweet's syndrome.

Fig. 3 a–d Remission of skin lesions after treatment with IVIG

Fig. 4 Recurrence of skin lesions on the back of neck

Fig. 5 Repeat Skin biopsy on recurrent skin lesions on HPE is suggestive of Sweet's Syndrome. (H&E, ×100)

Compliance with Ethical Standards

Conflict of interest None of the authors have any conflict of interest to mention.

Ethical Approval This article does not contain any studies with animals performed by any of the authors. This article does not contain

any studies with human participants or animals performed by any of the authors.

Informed Consent Informed consent was obtained from the participant included in the study.

Fig. 6 Remission of skin lesions after repeat IVIG treatment

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