



Complete Resolution of Intractable Skin Lesions of Drug-Induced Hypersensitivity Syndrome after Cord Blood Stem Cell Transplantation

Toshiaki Takezaki¹, Gaku Oshikawa², Jun Taguchi³ and Kazuteru Ohashi^{1*}

¹Division of Hematology, Tokyo Metropolitan Cancer and Infectious Diseases Center, Komagome Hospital, Japan

²Division of Hematology, Musashino Red Cross Hospital, Japan

³Division of Hematology, Shizuoka Red Cross Hospital, Japan

Keywords

DIHS; HHV-6; CBT

Clinical Image

A 42-year-old woman developed Drug-Induced Hypersensitivity Syndrome (DIHS) during the induction treatment with dasatinib (DSA) and conventional chemotherapy for Philadelphia chromosome positive acute lymphoid leukemia. Diagnosis of DIHS was made by the following typical clinical features including rapidly expanding skin eruption, high fever, liver dysfunction, peripheral lymphadenopathy and atypical lymphocytosis as well as reactivation Human Herpes Virus 6 (HHV6). Although febuxostat was immediately discontinued as the most plausible drug as a cause of DIHS, and acetaminophen and DSA were also withdrawn based on a positive finding of drug-induced lymphocyte stimulation test and concerning possible exacerbation of DIHS through DSA-induced large granular lymphocytosis, respectively; skin lesions waxed and waned under an aggressive intervention including high dose steroid, cyclosporine or high dose gamma globulin (Figure A and B). Moreover, the patient molecularly relapsed 3 months later; therefore the patient was retreated with imatinib and chemotherapy. During the second molecular remission, the patient eventually underwent Cord Blood Transplantation (CBT) from 2 human leukocyte antigen-mismatched unrelated donor with myeloablative conditioning including cytarabine and cyclophosphamide, followed by fractionated total body irradiation (12 Gy) and tacrolimus and short-term methotrexate were used as Graft-Versus-Host Disease (GVHD) prophylaxis. The post-

OPEN ACCESS

*Correspondence:

Kazuteru Ohashi, Division of Hematology, Tokyo Metropolitan Cancer and Infectious Diseases Center, Komagome Hospital, 3-18-22 Honkomagome, Bunkyo-ku, Tokyo, 113-8677, Japan, Tel: 81-3-3823-2101; Fax: 81-3-3824-1552;

E-mail: k.ohashi@cick.jp

Received Date: 02 May 2018

Accepted Date: 28 May 2018

Published Date: 09 Jun 2018

Citation:

Takezaki T, Oshikawa G, Taguchi J, Ohashi K. Complete Resolution of Intractable Skin Lesions of Drug-Induced Hypersensitivity Syndrome after Cord Blood Stem Cell Transplantation. *Clin Oncol.* 2018; 3: 1471.

Copyright © 2018 Kazuteru

Ohashi. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

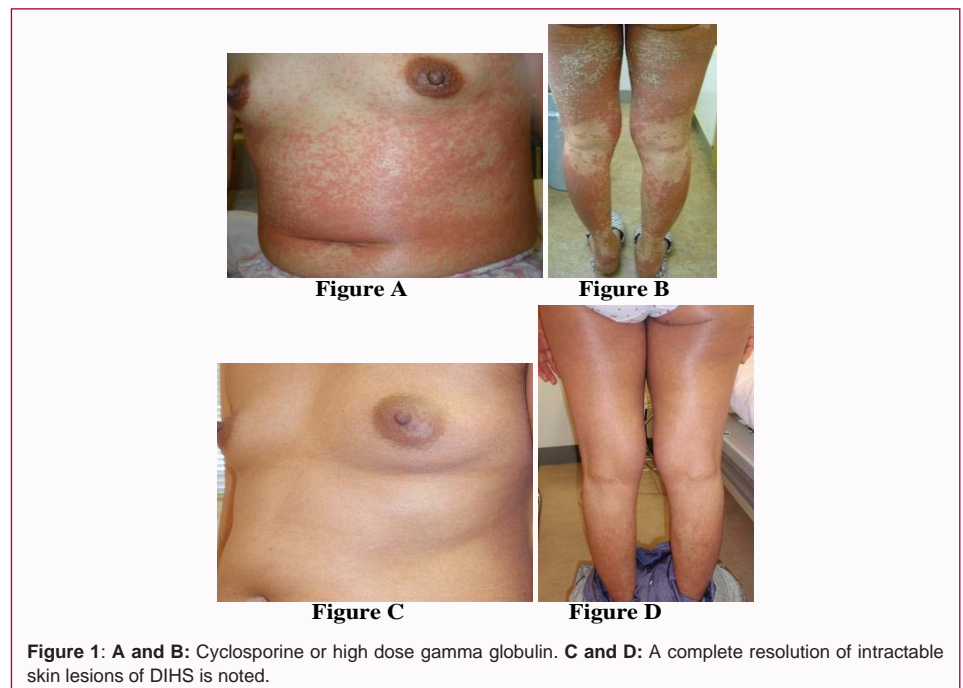


Figure 1: A and B: Cyclosporine or high dose gamma globulin. C and D: A complete resolution of intractable skin lesions of DIHS is noted.

transplant clinical course was essentially unremarkable with no embarrassing clinical events caused by HHV-6 or other herpesvirus reactivation as skin lesions drastically improved with only one episode of exacerbation as the patient developed acute GVHD of skin (stage 3), which was well stabilized with systemic steroid. Currently, 6 months after CBT, a complete resolution of intractable skin lesions of DIHS is noted (Figure C and D). Although we postulate the elimination of auto-reactive lymphocytes by CBT as well as immunosuppressive therapies have eventually contributed to the marked improvement of DIHS, our case may provide a precious opportunity to consider a combination of immunologic reaction and HHV-6 reactivation in flare-up of DIHS [1,2].

References

1. Kitamura K, Asada H, Iida H, Fukumoto T, Kobayashi N, Niizeki H, et al. Relationship among human herpesvirus 6 reactivation, serum interleukin 10 levels, and rash/graft-versus host disease after allogeneic stem cell transplantation. *J Am Acad Dermatol.* 2008;58(5):802-9.
2. De Pagter PJ, Schuurman R, Meijer E, Van Baarle D, Sanders EA, Boelens JJ. Human herpesvirus type 6 reactivation after haematopoietic stem cell transplantation. *J Clin Virol.* 2008;43(4):361-6.