

## 1.Rituximab – Novel Biologic for Management of Treatment Resistant Pemphigus Vulgaris

The Department of Dermatology , PSH received a case of a 35 year old male, who reported with complaints of raw erosion over whole body since few months. On detailed history & examination it was diagnosed as a case of Pemphigus Vulgaris with both oral & cutaneous flaccid blisters & erosion since 2 years. The patient was taking treatment in form of systemic steroids & cyclosporine for a year despite of which he developed fresh lesions.

The patient was started on injection Dexamethasone, systemic antibiotics and supportive treatment. The patient started showing sign of recovery in 7 days but a few new lesions were appearing, so it was decided with patient's consent to give him Rituximab.

After infection control was established at 20 days, he was given Injection Rituximab according to the lymphoma regime i.e. 375 mg/ m<sup>2</sup> at weekly doses in ICU facility.



**Patient during treatment**



**Patient after treatment**

After 3 doses the patient recovered by 90% with only facial lesions that demonstrated a slow response to treatment. He was discharged with prescription of oral prednisolone and cyclophosphamide after 60 days with facial erosion of size 3x3 cm over both molar areas. The patient is on regular follow up and no signs of development of new lesions or any side effects.

The mainstay of treatment of Pemphigus Vulgaris is systemic corticosteroids. Immunosuppressive agents (ISAs) are used for their steroid-sparing effect and possible ability to reduce autoantibody production. Many patients do not respond to high dose long-term corticosteroids in combination with multiple ISAs. Newer methods of treatment, such as rituximab, have shown promise in such patients.

Rituximab is a chimeric monoclonal antibody that targets the CD20 molecule on B cells resulting in their lysis. In 1997, the US Food and Drug Administration approved its use in lymphoma, in 2006 for rheumatoid arthritis (RA), in 2010 for chronic lymphocytic leukemia, and in 2011 for Wegener's granulomatosis . Its use in Pemphigus Vulgaris is off label. The rationale for the use of rituximab in patients with Pemphigus Vulgaris is based on its ability to deplete CD20+ B cells that presumably produce pathogenic antibodies.

Thus Rituximab is an excellent therapeutic option for resistant & relapsing cases, which fail to respond to conventional treatment options, though cost is a major factor, which influences its use in Dermatology.

*\*Attending Clinicians were Dr. Ankit Bharti, Dept. of Skin & VD and Dr. Pankil Patel, Senior Resident, Dept. of Skin & VD, PSH*