中文題目：使用 Endoxan 治療頑固型免疫性血小板低下- 個案報告

英文題目：Endoxan off-label use for refractory ITP treatment – a success stories

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Introduction

Immune thrombocytopenia (ITP) is an acquired thrombocytopenia caused by autoantibodies against platelet antigens. It is one of the more common causes of thrombocytopenia in otherwise asymptomatic adults. Secondary ITP is ITP associated with another condition such as systemic lupus erythematosus [SLE]. The treatmentn goal of ITP is to keep safe platelet count to prevent clinically important bleeding. If patient presented with with thrombocytopenia that is associated with significant bleeding symptoms (eg, mucosal purpura, more serious bleeding) or for severe, persistent or recurrent thrombocytopenia (eg, platelet count <20,000/microL), second-line therapy or combination therapy were considered. For refarctory ITP case, choices vary according to clinician and patient preference.

Here, we reported a combination treatment with Endoxan and plasm exchange to treat a refractory secondary ITP case.

Case Presentation

A 59 y/o woman was a case of secondary ITP caused by systemic lupus erythematosus. She was admitted to Hematology ward due to severe thrombocytopenia(platelets count 2000/μ) and gastrointestinal bleeding. First line therapy including of high dose steroid, Intravenous immunoglobulin (IVIG) 0.8-1 g/Kg QD and plasm exchange with Fresh Frozen Plasma. However, platelets count was still around 1000/u-4000/u. Unfortunately, intubation was performed due to airway compressed by neck hematoma after central line inserted. Under emergent condition associated refractory ITP, we tried combination therapy by Endoxan 700 mg/Body Surface Area with plasm exchange with Fresh Frozen Plasma one course and kept hydrocortisol 100 mg Q12H used . Patient's platelet count returned to 7,4000/u before discharge within 2 weeks. We kept predinisolone 100 mg QD and then tappered gradully. Under regular Hematology clinic follow-up, we kept Prednisolone 5-10 mg QD and patient's platelet count kept safe range more then 57 months until now.

Discussion

There are two principal choices of second-line, which differ in their efficacy and risks: splenectomy and rituximab. These modalities have the potential to establish a long-term remission. In refractory situation, several other therapies and combinations of agents have been used. Endoxan (Cyclophosphamide) was one of off-lab used choices of treatment for refractory ITP. Mechanisms of action of Endoxan to treat refractory was by decreased production and release of IL-2 and IL-2-induced activation of resting T lymphocytes. Tracing related literature, Drew Provan et al. has revealed Endoxan (Cyclophosphamide) off-label use used for refractory ITP. He used either orally (1-2 mg/kg daily for at least 16 weeks) or intravenously (0.3-1 g/m2 for 1-3 doses every 2-4 weeks), has been used for patients refractory to corticosteroids and/or splenectomy. Response rates varied from 24% to 85% and toxicity was mild to moderate.The complication of sterility after treatment for ITP has not been adequately addresse. Faiz et al also reported a case of refractory ITP treatment with high-dose pulse Cyclophosphamide (50 mg/kg/day) for 4 d ays for the first cycle, followed by four more cycles of 500 mg cyclophosphamide IV 4 –6 weeks apart based on count recovery.) and Eltrombopag. To our case, it was first case that recieved combination therapy with Endoxan 700 mg/Body Surface Area with plasm exchange with Fresh Frozen Plasma for just one therpay course and got long-lasting complete remission (CR) for 58 months until now. There was still no standar protocal for second-line therapy or combination therapy. Choice vary according to clinician and patient preference; it may take time to find the best approach for each individual patient.