ORIGINAL RESEARCH PAPER

General Medicine

THE CLINICAL PROFILE AND OUTCOME OF TREATMENT OF IMMUNE THROMBOCYTOPENIA PATIENTS IN IMPHAL

KEY WORDS:

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INTRODUCTION:

Previously termed as idiopathic thrombocytopenic purpura, it is an acquired disorder in which there is immune mediated destruction of platelets and possibly inhibition of release from megakaryocyte.[1] ITP can be classified as

- Newly diagnosed(≤ 3 months)
- Persistent (3months to 12months)
- Chronic (> 12months)

Another form of classification

- Primary: where there is no identifiable underlying etiology.
- Secondary: include autoimmune conditions like SLE/APLA, Evans syndrome and hepatitis B/C and HIV.

ITP is defined by platelet of less than 1 lakh/microlitre of blood. Auto-antibodies against platelet membrane GPIIbIIIa has been formed that lead to destruction of platelets. Clinical features include skin bleed, mucocutaneous bleeding, per vaginal bleed,oral, gastro-intestinal, menstrual bleeding, CNS bleed.[2]

First line treatment include steroids,RhoD and IVIG. Among second line, rituximab, splenectomy and thrombopoietin receptor agonist. Danazol azathioprine, cyclophosphamide, dapsone etc as 3rd line.

AIMS AND OBJECTIVE:

To study the clinical profile and outcome of treatment of immune thrombocytopenia patients in JNIMS.

MATERIALS AND METHOD:

An observational study was done. It included 31 patients above 18 years who were diagnosed as ITP according to American society of hematology.[3] Complete blood count (CBC),including haemoglobin estimation, platelet count and peripheral blood smear examination was performed. Helicobacter pylori infection will be diagnosed by the positivity of serum antibodies. Patients were treated according to their presentation and response to outcome of treatment studied. Statistical analysis was done using stata 13.0 software.

RESULTS:

Majority of the patients were in age group of less than 30 years (48.39%). In the study, female patients were 25 in number (80.65%) and male were 6 (19.35%). The male to female ratio was 1:4.1.

The baseline platelet count was less than 5000/μL at the time of diagnosis and time since diagnosis was more than 12 months in 18 patients (58.06%). Most of the patients were chronic ITP (58.06%), 2 were persistent ITP and 11 were newly diagnosed case of ITP.

In our study, among 31 patients of ITP, primary immune thrombocytopenia was diagnosed in 26 patients (83.87%) and secondary ITP in 5 patients (16.12%). Among secondary causes of ITP, in our study 3 patients were diagnosed as Evans syndrome. 1 patient was diagnosed to be hypothyroid and 1 patient was Helicobacter pylori positive.[19,20]

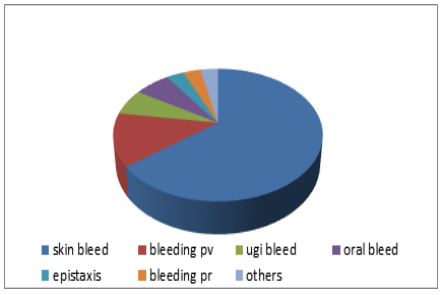

Figure 1: Clinical presentation of ITP

TREATMENT:

Four patients were given intravenous high dose dexamethasone and 24 patients were given intravenous high dose methyprednisolone[5], 27 patients were given oral steroid and 6 patients received IVIG[6]. 9 patients recieved rituximab[7],5 patients underwent splenectomy[8] and 7 patients recieved TPO RA romiplostim and eltrombopag[9,10]. 6 patients received danazol, 9 azathioprine and 2 dapsone[11].One patient was treated for Helicobacter pylori.[18]

TABLE 1: Treatment of ITP and its response.

Treatment	No. of patients	Response n(%)		Nonresponse n(%)
1st line		Complete	Partial	
Steroid	4(12.90)	-	2(50)	2(50)
Iv	24(77.42)	4(16)	7(29.16)	14(58.33)
dexamethasone	27(87.10)	1(3.70)	2(7.40)	24(88.88)
Iv methylprednisolone	6(19.35)	3(50)	-	3(50)
Oral steroids				
IVIG				
2nd line	9(29.03)	1(11.11)	2(22.22)	6(66.66)
Rituximab	5(16.13)	4(80)	-	1(20)
Splenectomy	4(12.90)	1(25)	1(25)	2(50)
Eltrombopag	3(9.68)	1(33.33)	2(66.66)	-
Romiplostim				
3rd line	6(19.35)	-	-	6(100)
Danazol	9(29.03)	-	1(11.11)	8(88.88)
Azathioprine	2(6.45)	-	-	2(100)
Dapsone				

DISCUSSION:

Most of the patients were in age group of 18-30(48.39%) and

male to female ratio was 1: 4.1 in our study.[12,13] Baseline platelet count in most of patients (48.39%) were less than 5000/μL.The most common clinical presentation was skin bleed. Primary ITP was diagnosed in 26 patients (83.87%) and secondary ITP in 5(16.12%).Steroids were the most commonly given 1st line treatment. IV methylprednisolone had complete response of 16% and partial response of 29.16%. IV dexamethasone had 50 % complete response. IVIG had 50% complete response. Splenectomy had higher response than rituximab.[14-16] Among TPO RA, romiplostim had higher response than eltrombopag in our study. The effectivesness of IV steroids and 3rd line treatment were lesser compared to other studies probably due to small study population.

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