Exploring the (G)old standard treatment in steroid refractory idiopathic thrombocytopenic purpura in resource constraint countries

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Dear editor,

The treatment options in cases of steroid refractory Idiopathic Thrombocytopenic Purpura (ITP) [1] include Intravenous Immunoglobulin (IV Ig) [2], Splenectomy [3], Vincristine [4], immunosuppressive agents like Azathioprine, Immune modifiers like Cyclosporine Rituximab.

However, in resource constraint countries like India, the options like IV Ig, and other immunosuppressant agents is prohibitive owing to the high cost. Therefore we thought of exploring the two standards of treatments, which costs less that is Splenectomy and the vincristine therapy. A total of 9 steroid refractory ITP patients were treated and 4 of them underwent splenectomy and the remaining received

Table 1 Characters of patients

Patient number	Age/ Sex	Platelets		Time for response	Duration of response	Treatment received	Side effect
		Base line	Post treatment				
01	18/M	26,000	2,28,000	1 day	>12 months	Splenectomy	pneumonia
02	26/F	12,000	3,20,000	16 days	>14 months	VCR 0.8 mg/wk	None
03	22/F	22,000	1,80,000	20 days	>8 months	VCR 1.0mg/wk	Grade I neuropathy
04	43/M	24,000	3,70,000	2 days	>11 months	Splenectomy	None
05	44/F	16,000	2,12,000	10 days	>7 months	VCR 1.2 mg/wk	None
06	36/M	18,000	1,86,000	1 day	>16 months	Splenectomy	None
07	32/M	21,000	2,44,000	13 days	>14 months	VCR 2.0 mg/wk	None
08	30/F	17,000	4,00,000	2 days	>18 months	Splenectomy	pneumonia
09	43/F	15,000	1,50,000	13 days	> 5 months	VCR 0.9 mg/wk	None

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vincristine at relatively higher doses of 0.5 mg/m²/week for a median of 8 doses (ranging from 6–10). The baseline character of the patients like duration of illness, and baseline platelet count in both the groups were similar and represented in Table 1.

The rapidity of platelet count was faster in the Splenectomy group compared to the vincristine group ($p < 0.05$). The cost involved with the vincristine treatment is much less compared to the Splenectomy (\$600 in Splenectomy

group vs. \$50 in vincristine group). The overall side effects and the complication rates were acceptable in both the groups. The lesser degree of adverse events observed in the present study are probably due to the lesser doses of Vincristine used (which were supposed to be equally effective) [1]. However this cost is much less compared to the estimated cost of other modalities like IV Ig (costs \$3600) or the other forms of immune suppression therapy (average cost \$2000–4500). Therefore in patients who don't have life threatening disease, vincristine is still one of the excellent options and the results are comparable with the gold standard of treatment that is Splenectomy. Though, cost wise there are other drugs like azathioprine, dapsone and danazole are comparable to the vincristine, the existing literature in those molecules are either conflicting or suggesting a long term treatment. Therefore though they are very economical for second line treatment, we did not explore

them and the main purpose is to compare the vincristine with splenectomy in this communication.

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