

A second-line escalating treatment strategy for children with severe chronic immune thrombocytopenia: A retrospective data from a single-center

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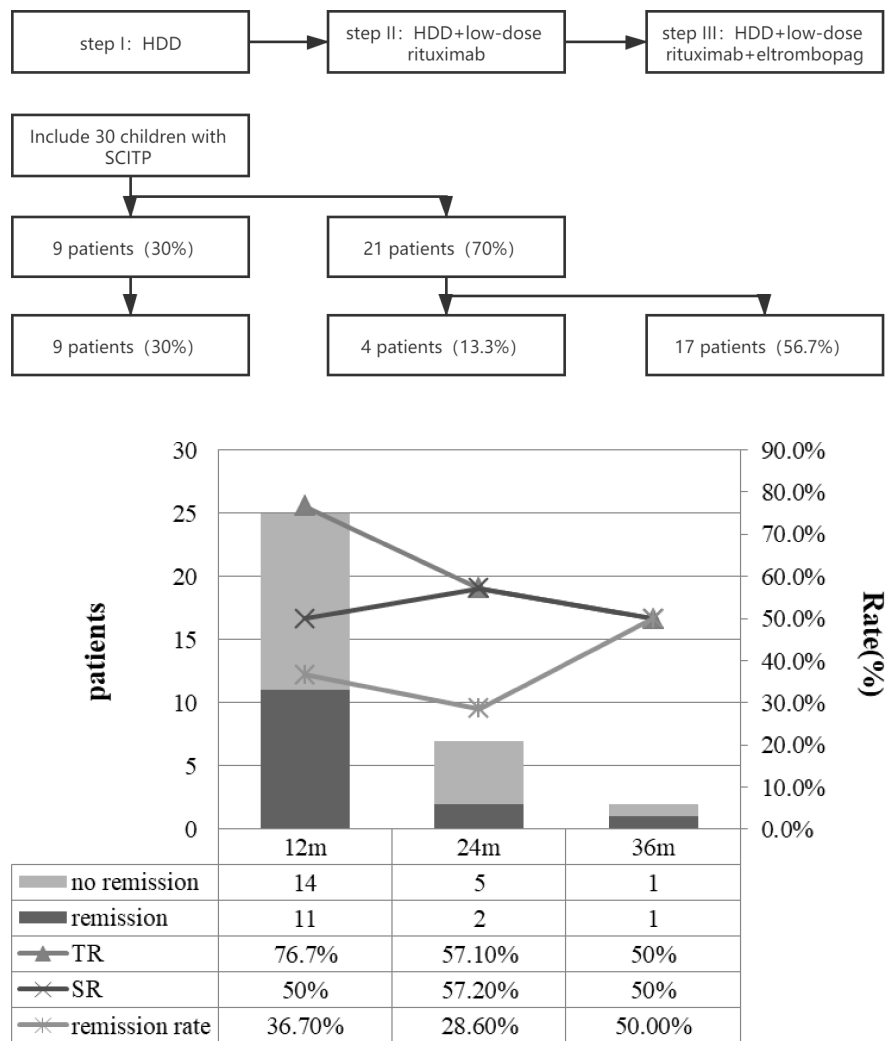
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Abstract

Objective: To analyze the effect of a novel second-line escalating treatment strategy (high-dose dexamethasone (HDD), low-dose rituximab to eltrombopag) for children with severe chronic immune thrombocytopenia (SCITP). **Materials and Methods:** This study was a single-center, retrospective cohort study. The second-line escalating strategy included 3 steps: Step I (6 courses high-dose dexamethasone: HDD), Step II (HDD combined with low-dose rituximab), and Step III (eltrombopag). **Results:** A total of 30 cases (18 males and 12 females) were included; the median age was 8.83 (1.42-13.9) year-old, the duration time of ITP was 20.5 (12.0-96.0) months, and the platelet counts were $15 (3-29) \times 10^9/L$. After the median 14 (12-37) months' treatment, the remission rate was 36.7% (11/30), and the sustained response (SR) rate was 68.2% (15/22). In eltrombopag (step III) cases, 47.5% (8/17) maintained platelet $\geq 50 \times 10^9/L$, 37.5% (3/8) dose tapering, and 25% (2/8) were successfully discontinued from medication. The number of patients at 12th, 24th, and 36th months was 30, 7, and 2, with the total response (TR) and remission rates of 80% (36.7%), 57.1% (28.6%), and 50% (50%), respectively. The total relapse rate was 26.7% (8/30), three cases (75%, 3/4) from Step II and 5 cases (41.7%, 5/12) from Step III, none in Step I. **Conclusion:** The new second-line escalating strategy for children SCITP has an effective improving rate with 36.7% remission and 68.2% SR; 30% could benefit and retain stable response from HDD treatment. Combined treatment with eltrombopag can reduce the relapse rate of low-dose rituximab.

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