

**Low dose factor prophylaxis management in pediatric hemophilia A and hemophilia B; Siriraj experience.**

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**Abstract**

Background: Factor Prophylaxis has commonly become standard treatment for severe hemophilia patients. The world federation of hemophilia recommends prophylaxis for a long-term therapy.

Objective: To comparing the efficacy between low dose factor VIII/IX prophylaxis and on-demand therapy to reduced annualized bleeding rate (ABR), target joint, cost and amount of factor VIII/IX used in moderate to severe hemophilia A and hemophilia B patients at Siriraj pediatric hemophilia center. Moreover, the evaluation of quality of life, the reasons to continue low dose prophylaxis and the factor barriers using low dose prophylaxis were evaluated by research questionnaire.

Methods: Retrospective data of hemophilia patients who have been treated at the department of pediatrics, Siriraj hospital from 2012 to 2017.

Results: A total of twelve case of hemophilia patients were enrolled in the study. Ages ranged from 7-17 year (median, 12 year). Low dose prophylaxis with FVIII/IX significantly reduced joint bleeds ( $p < 0.05$ ), overall ABR ( $p < 0.05$ ) and number of target joint ( $p < 0.05$ ). Responses from survey questionnaires reported that improving of the efficacy of bleeding control and joint protection improved the quality of life. In addition, adequate knowledge and economic capability of the families were reasons for choosing prophylaxis.

Conclusions: Low dose factor prophylaxis management in pediatric hemophilia A and hemophilia B reduced ABR and number of target joints in several patients. Furthermore, the improvement of treatment outcomes and lower cost of therapy make low dose factor prophylaxis accessible and attractive treatment option in future for developing country.

**Keyword:** annualized bleeding rate, hemophilia A and hemophilia B, low dose factor prophylaxis management, target joint.