Prophylaxis Analysis of Children Hemophilia A in Sichuan Province

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OBJECTIVES

Prophylaxis can prevent bleeding and joint damage, and should be the goal of therapy for children with severe hemophilia A. In order to learn about the present situation of prophylaxis in Sichuan Province, we collect the prophylactic treatment data of children with hemophilia A and analyze its characteristics.

Table 1 Effect of prophylactic treatment for joint bleeding in hemophilia A (times/month)

Types	Cases	Before Treatmnet	After Treatment	P
Middle	33(61.1%)	1.0 (0.5-2.0)	0.2 (0.0-1.0)	0.000
Severe	21(38.9%)	1.0 (0.8-3.5)	0.5 (0.1-1.4)	0.000
P		0.523	0.247	

Table 2 Frequency of joint bleeding in different prophylactic treatment

Prophylaxis	Cases	Before Prophylaxis	After Prophylaxis	P
Primary prophylaxis	7	-[1])	-[1])	-
Secondary prophylaxis	26	1.5 (1.0-3.0)	0.5 (0.2-1.2) *	0.000
Tertiary prophylaxis	7	1.0 (0.5-5.0)	0.5 (0.2-4.0)	0.017
Intermittent prophylaxis	21	1.0 (0.5-2.0)	0.0 (0.0-0.5) #	0.000
P		0.599	0.008	

CONCLUSIONS

In Sichuan province, only a small percentage of children with hemophilia A received prophylaxis therapy, with older age, short duration, small dosage and low frequency. Low-dose or medium-dose prophylaxis (15.0±5.9 IU/ Kg) could significantly decrease the frequency of joint bleeding, but could not totally prevent the occurrence of the arthropathy.

METHODS

Prophylaxis data for sixty-one children with hemophilia A were retrospectively analyzed.

RESULTS

There were 156 children of hemophilia A were registered in our hospital between January 1, 2008 and August 1, 2015, in which 61 patients (39.1%) had been treated by prophylaxis. The age of starting prophylaxis was 6.8±4.7 years (0.7 ~ 16.6years).The prophylactic dosage was 15.0±5.9 IU/ Kg (5 ~ 33 IU/ Kg) and the frequency 1.3±0.6 times per week (0.25-2 times per week) . The average duration for prophylaxis was 2.1±1.8 years. Only seven cases (11.5%) were received primary prophylaxis for 3.3±2.9 yeas, 26 cases (42.6%) were secondary prophylaxis for 3±1.6 years, 7 cases (11.5%) were tertiary prophylaxis for 2.4±1.5 years , and 21 cases (34.4%) were intermmitent prophylaxis for 4.6±3.0 months. Thirty-one (50.8%) patients had quitted prophylaxis because of economic pressure, factors shortage or venous access difficulty.

Joint bleeding significantly decreased from 1.0 (0.5-3.0) times per month before prophylaxis to 0.3 (0.0-1.0)times per month after prophylaxis (P=0.000). The incidences of hemophilic arthropathy were 11.5% and 26.2% respectively before and after prophylaxis (X^2=4.340, P=0.037).The occurrence of arthropathy was significantly associated with the joint bleeding (P=0.005, r=-0.532). The incidence of inhibitor were 18.4% (7/38). The medical cost of prophylaxis was 308.7 yuan/ kg per month, 2.4 times than that in on-demand therapy, which was 131.1 yuan/kg per month.