

Table-1. Distribution of alpha thalassemia genotypes among the severe malaria cases and healthy control:

	Normal Alpha Globin Genotype $\alpha\alpha/\alpha\alpha$ N(%)	Heterozygous Alpha thalassemia $-\alpha/\alpha\alpha$ N(%)	Homozygous Alpha thalassemia $-\alpha/-\alpha$ N(%)	Total deletional Alpha thalassemia
CONTROL (N=271)	141(52.0)	85(31.4)	45(16.6)	130(48.0)
CASES (N=279)	171(61.3)	65(23.3)	43(15.4)	108(38.7)

Table-2. Clinical characteristics of severe malaria cases at the time of admission with respect to their alpha thalassemia status.

Clinical features of severe malaria cases.	Total no. of severe malaria cases N=279	Normal alpha globin genotype $\alpha\alpha/\alpha\alpha$ N=171 (A)	Heterozygous Alpha thalassemia $-\alpha/\alpha\alpha$ N=65 (B)	Homozygous Alpha thalassemia $-\alpha/-\alpha$ N=43 (C)	Total deletional Alpha thalassemia N=108 (D)=(B)+(C)	p value
Cerebral malaria	76(27.2)	57 (33.3)	12(18.5)	7(16.3)	19(17.6)	p<0.05
Multi organ dysfunction	42(15.05)	32(18.7)	6(9.23)	4(9.3)	10(9.3)	p<0.05
Anemia	45(16.13)	29(16.9)	10(15.4)	6(13.9)	16(14.8)	p>0.05
Jaundice	83(29.7)	61(35.7)	14(21.5)	8(18.6)	22(20.4)	p<0.05
Acute renal failure	89(31.9)	67(39.2)	12(18.5)	10(23.3)	22(20.4)	p<0.001
Fatal outcome	24(8.6)	19(11.1)	3(4.6)	1(2.3)	4(3.7)	p<0.05