

Table SI. Previously described mutations in the GJB3 and GJB4 gene, and associated phenotype of erythrokeratoderma variabilis

Mutation		Skin phenotype			Onset	Course	Seasonal variation of phenotype	Reference
DNA	Protein	Non-PPK	PPK	Red patches				
<i>Mutations in the GJB3 gene encoding for connexin31</i>								
403C>G	L135V	Limbs, neck, axillary folds	N/A	Limbs, lower trunk; painful, transient	Birth	N/A	Worse in winter, after mechanical stress	4
34G>C	G12R	Localized	Yes	N/A	N/A	N/A		9
35G>A	G12D	Limbs and trunk; symmetric, rugose	N/A	Chest, neck; figured, transient	Birth	N/A		9
256T>A	C86S	Generalized or localized with inter-individual variability	Yes	N/A	N/A	N/A		9
125G>C	R42P	Extensor/flexor sites of limbs, neck, trunk	Yes	Any body site; transient	Early infancy	N/A	Worse in winter	10
409T>C	F137L	Pronounced at lower limbs; generalized, hystrix-like	Yes	Figurate, transitory	N/A	N/A		2
34G>A	G12S	N/A	N/A	N/A	N/A	N/A		11
101T>C	L34P	Extensor sites of limbs, trunk, earlobes	No	Abdomen; variable over weeks	Early infancy	Progressive till puberty, then improvement	Worse in summer	12
829G>A	E100K	Generalized, sparing only small parts of body	Yes	Diffuse, variable	Birth	Increase of hyperkeratoses, decrease of red patches in 1 st decade of life		13
625C>T	L209F	Limbs, lower trunk; symmetric, large areas of normal skin	Yes	Sharply demarcated	Birth	Red patches become hyperkeratotic in 1 st decade of life	Worse in summer, winter, tiredness, stress; hypertrichosis	14
134G>A	G45E	Extensor sites of limbs, face	Yes	Extensor sites of limbs	N/A	N/A		7
141G>C	D47E	Limbs	Yes	Variable in size, abnormal shape	Early infancy	N/A		15
<i>Mutations in the GJB4 gene encoding for connexin30.3</i>								
411C>A	F137L	Generalized, fixed	No	Erythema gyratum-like	Birth	Red patches become hyperkeratotic	Worse in summer	1
35G>A	G12D	Limbs, trunk; generalized, symmetric	Yes	Short lasting	N/A	N/A		3
253A>C	T85P	Only over larger joints	No	Generalized, change rapidly	Infancy	Red patches resolve in adolescence	Worse in winter, variable phenotype	3
566T>A	F189Y	Severe, ridging in large folds; hypertrichosis lanuginosa	No	None	N/A	N/A		3
64G>A	R22H	Limbs; symmetric, faint underlying erythema	No	Transient	Infancy	Regression in adolescence		3
568A>T	M190L	Flexures sites of limbs; fixed	Yes	Arms, lower trunk, face; transient	Early infancy	N/A		14

PPK: palmoplantar keratoses; N/A: not available.