Condition: Incontinentia pigmenti

Inheritance:

X-linked dominant, lethal in males.

Genetic etiology:

Loss of function mutation of *IKBKG* gene (also referred to as *NEMO*). Primarily affects females and is lethal to hemizygous males *in utero*. Hypomorphic mutations of same locus cause X-linked recessive ectodermal dysplasia with immune deficiency, which primarily affects males. IKBKG is a regulator of NFkB intracellular signaling.

Frequency:

Rare (frequency unknown)

Clinical features:

Dermatological features begin shortly after birth with lesions that evolve from erythematous to bullous to verrucous. Eventually develop streaky hyperpigmentation along lines of Blashko, which over time fade to streaks of atrophic skin with absent hair follicles. Neurological features can include seizures and developmental delay, thought to result from neonatal ischemic episodes. Retinal vascular lesions can affect vision. Teeth can be misshapen. Expression can be widely variable based on patterns of nonrandom X chromosome inactivation.

Management:

Symptomatic treatment.

Genetic counseling:

An affected female faces a 50% risk of transmission of the disorder to a daughter and a 50% chance of transmission to a male fetus, who will undergo miscarriage. Genetic testing is available.

Human Genetics and Genomics, Fourth Edition. Bruce R. Korf and Mira B. Irons.