Carotenodermia

A 1½-year old boy presented with yellowish discoloration of palms and soles for 2 months. He was the first child born to nonconsanguineous parents. His growth and development was normal. He was given carrot juice daily (2 carrots per day) from 6 months of age. On examination he had yellowish discoloration of palms and soles (***Fig.* 1**). His sclerae were not yellow; systemic examination was normal. Investigations showed a total serum bilirubin of 0.3 mg/dL, SGPT 16 U/L and prothrombin time 14s. The complete blood counts, blood glucose, FT4, TSH and lipid profile were normal. Serum β carotene level could not be done. A diagnosis of carotenodermia was made. The mother was advised to stop feeding the child with carrot juice. When the child was reviewed 3 months later, the yellowish discoloration of palms and soles completely disappeared confirming our diagnosis of carotenodermia.

Carotenodermia or hypercarotenemia is yellowish discoloration of skin, most often occurring in the palms and soles as a result of high levels of carotene in the body. Carotenemia may occur at any age, but it is most common in children. Carotenodermia occurs upon chronic consumption of carrots, papaya or other carotenoid rich foods in abundance. Hypothyroidism, diabetes mellitus, anorexia nervosa, hyperlipidemia, porphyria and renal disease may be associated with carotenemia unassociated with ingestion of carotene. Metabolic carotenemia without a history of excessive carotene intake may be due to a genetic defect in the metabolism of kerotenoids. By discontinuing consumption of high quantities of carotene the skin color returns to normal. Awareness of carotenemia may avoid confusion with jaundice and unnecessary diagnostic tests. Yellow sclerae are absent in children with carotenodermia which differentiates it from jaundice. The serum β-carotene level is increased to 3 to 4 times normal. Carotenemia is a benign condition and requires no active treatment.

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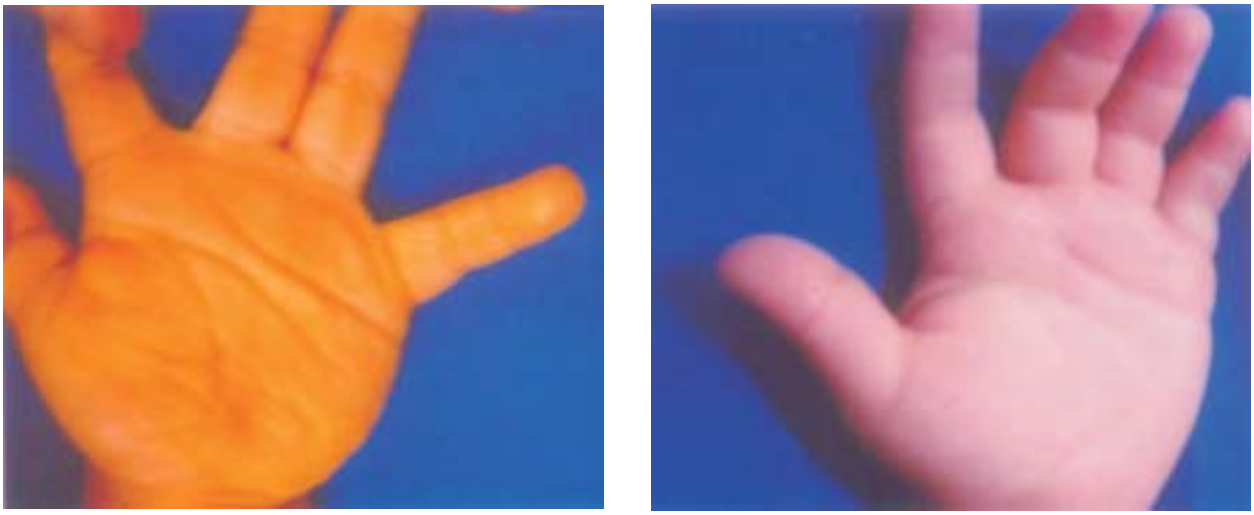

FIG. 1. *Palms of the child with carotenodermia (left image) and that of a normal child (right image).*