

They may also occur on the mucous membranes and in the internal organs, tendons, arteries and bile ducts. Jaundice exists in nearly all cases.

Xanthoma is of slow growth, tends to reach a certain dimension and then remains stationary.

*Etiology.* Xanthoma of the eyelids is seen chiefly in middle-aged women, especially those who are deeply pigmented about the lids. Jaundice accompanies the tuberoso and multiple varieties and is associated with disorders of the liver.

Gout and migraine are sometimes found associated with xanthoma.

*Diagnosis.* The diagnosis of xanthoma is made by the presence of yellow patches set in the skin, so soft as not to be appreciable to the touch. The tuberoso form exhibits yellow nodules imbedded in the skin. Xanthoma multiplex may be confused with *urticaria pigmentosum* but does not present wheals nor do the lesions itch.

The disease is rare.

*Pathology.* Xanthoma is a benign, connective tissue new-growth containing large multinuclear, epitheloid cells filled with fat drops. The xanthoma cells are developed from leucocytes and connective tissue corpuscles and are inflammatory in origin. Xanthoma palpebrarum is thought to be due to degeneration of muscle fibres, embryonically misplaced.

*Treatment.* Excision, electrolysis and destruction with the galvanocautery are the means offered for the removal of the growths. Trichloroacetic acid may be applied with caution to the lesions. The X-rays have been suggested, and also the high frequency current.

#### XANTHOMA DIABETICORUM.

*Definition and Description.* Xanthoma diabeticorum is a cutaneous affection of rapid evolution and involution and associated with diabetes. The lesions are seen chiefly about the knees and elbows, the extensor surfaces of the extremities, the buttocks and genitals. They are papular, yellowish-white at the summit, like an acne pustule, and are surrounded by a red areola. The lesions are discrete and do not contain pus but are found, on section, to be solid. Itching is more or less marked. The lesions disappear in a few weeks but may be followed by fresh crops. The affection occurs in stout, young or middle-aged individuals and is always associated with diabetes.

*Treatment.* The treatment of xanthoma diabeticorum is that of the associated diabetes.

#### XERODERMA PIGMENTOSUM.

*Synonym:* Atrophoderma Pigmentosum, Kaposi's Disease.

*Definition.* Xeroderma is a congenital, fatal disease characterized by freckle-like pigmentation, telangiectases, irregular atrophy and malignant new-growths.

*Symptoms.* The affection begins in the first year of life, usually in

the summer, as an erythema resembling sunburn. This may be absent and the first stage represented by freckle-like pigmentations on the exposed parts of the body, face, feet and hands. After a time telangiectasic points and twigs, together with white, atrophic spots, make their appearance, scat-



Fig. 115.—Xanthoma Diabeticorum (Uma).

tered irregularly among the freckles. The white spots tend to coalesce and form patches, the skin becomes stretched, shining and slightly scaly. The pigmented lesions gradually become elevated and warty; angiomatic growths appear in the telangiectasic areas; the skin has a stretched, parchment appearance; the eyelids are drawn downward in ectropion; the con-



conjunctiva and cornea are inflamed; there is intolerance of light; ulcers form on the affected surfaces.

The disease may remain more or less quiescent for some years when the pigmented and angiomatic areas undergo degeneration into epithelioma or sarcoma; the general health yields and the patient dies from marasmus or exhaustion.

*Etiology.* But little is known of the cause of xeroderma. It shows a tendency to occur in families, affecting either sex indifferently. It is more



Fig. 116.—Xeroderma Pigmentosum.

commonly seen in children than in adults. Some are inclined to attribute the disease to the effect of the chemical rays of sun light; others regard it as parasitic, but neither of these hypotheses has received support.

*Diagnosis.* In well-established cases the diagnosis is simple. There is no other affection which presents freckling, atrophic spots, telangiectases and neoplasmata.

The disease is rare.

*Pathology.* There is nothing distinctive in the pathologic findings in xeroderma. Changes characterizing the various lesions, pigment, atrophy, malignant degeneration and vascular alterations, are such as are found in these conditions separately. Kaposi maintains that the changes occur in

the papillary layer and epidermis and extend to the true skin. Crocker believes the disease to be a degeneration of the skin dependent upon a primary neurosis in which there is a congenital predisposition.

*Treatment.* Treatment is unavailing. Arsenic may be given in increasing doses for a long time. It is possible that radiotherapy offers a means of palliation.

*Prognosis.* The prognosis is unfavorable. The duration of life depends upon the early or late appearance of malignant changes and the extent of the ulceration.