It is certain that the initial claims as to the healing effect of vitamin A in dermatology were exaggerated. To reduce these claims to reasonable level was the aim of our prolonged experimental work and it is hoped that the results with the exact data will be presented at an early date.

Dr. H. Pollak: A rash of what looks like follicular hyperkeratosis is not uncommon in patients with carcinoma of the stomach. Here, according to Rhoads and his associates, the blood vitamin-A levels tend to be low, but cannot be raised by even large amounts of vitamin A. However, brewer's yeast brought about a significant rise in blood vitamin-A levels. There is, in general, much to suggest an interaction in metabolism between vitamin-A and vitamin-B complex, and it is difficult to say which vitamin is ultimately concerned. Even with regard to the photochemistry of visual purple, it is not certain whether B vitamins, perhaps riboflavin, are required for the utilization of vitamin A, or whether there is a relationship the other way round.

Dr. S. R. Brunauer: Shortly after S. Peck in the United States had published his paper on vitamin A and Darier's disease (Peck, S. M., Chargin L., and Sobotka, H. (1941), *Arch. Derm. Syph., Chicago,* **43,** 839), investigations were started at St. John's Hospital on the influence of vitamin A upon Darier's disease and other skin conditions, the results of which A. D. Porter and E. W. Godding are about to publish. In Darier's disease hardly any benefit was observed even after large doses of vitamin A had been administered. In cases of lichen pilaris there was no improvement either and the same applies to other skin conditions, e.g. ichthyosis, dry eczema. On the other hand, one case of pityriasis rubra pilaris cleared up with vitamin A as reported by A. D. Porter and E. W. Godding (*in press*). Whether this was a coincidence is difficult to say; at any rate the comments Dr. Leitner has made to-day suggest that the improvement was not purely incidental.

Mr. A. L. Bacharach: A low fat diet might seriously interfere with the absorption of carotene. We know nothing of the mechanism for conversion of carotene into vitamin A, and that introduces a further complication.

Dr. R. Brunel Hawes: Our observations on children suggest that vitamin-A deficiency has no relation to the skin condition. In the East I have given vitamin A by injection in large doses without observing the slightest effect on the skin. In this country we have taken batches of children showing various degrees of keratosis pilaris and given different batches vitamin A, vitamin C, and nicotinic amide without observing any alteration. I feel that the condition is possibly due to a relative deficiency of some fat or fatty acid to the carbohydrate intake. If this is so, one would therefore expect to see it more often in the East where the fat intake may drop to 8 to 11 grammes a day, and an increase in wartime in this country, especially in children of the "eating age", i.e. the second decade of life, when the carbohydrate intake would increase but the fat intake being rationed would remain the same.

The President: It does seem a little difficult to accept Dr. Stannus's theory entirely, because keratosis pilaris is always described as a congenital and familial condition, appearing about the age of 2 or 3, and persisting indefinitely. It affects the extensor aspect of the limbs, and rarely the face. This alleged vitamin-A trouble, as most of the accounts agree, occurs suddenly in people of varying ages. I agree that it is very commonly on the extensor aspect of the limbs—the front and sides of the thighs and the back and sides of the forearms. Keratosis pilaris is usually most marked on the back of the upper arms. The hyperkeratosis of scurvy is mainly on the buttocks and backs of the thighs and calves. I think there is something to be considered about the distribution.

Dr. Stannus (in reply): With regard to the distribution in keratosis pilaris, I would suggest the lesions are more widespread than some accounts of the disease would lead one to believe. This is an opinion based on the examination and study of hundreds of cases. Only by seeing large numbers in a comparatively short time is it possible to recognize the many variations in the evolution and distribution of lesions in this affection. In these and other respects I believe so-called "phrynoderma" is identical with keratosis pilaris.

The President has said that he thought "phrynoderma" was sudden in onset. Only one author has alluded to this. The same has been noted in keratosis pilaris and it always has to be remembered that suddenness of onset may only mean suddenness of recognition. Berès thought the lesions might be latent and then obvious as a result of sympathetic stimulation.

The biochemical aspects of the possible relationship of vitamin A and carotene with the skin are a most interesting study.

Pityriasis Lichenoides et Varioliformis Acuta.—G. B. DOWLING, M.D.

Male, aged 34. First seen on December 29, 1944, when he complained of a profuse eruption characteristic of pityriasis lichenoides et varioliformis acuta. There was a history of acute onset a month before. A month later the eruption was seen to be clearing up fairly rapidly. The case is shown as an example of this condition clearing up spontaneously within a comparatively short time.

The President: It is very interesting to see a case which has cleared up spontaneously.

Pemphigus Vegetans.—LOUIS FORMAN, M.D.

Miss I. M., aged 25.

October 1944 complained of soreness of mouth and oozing areas on the scalp. Seen December 1944 with vegetating plaques groins and scalp. There were also discrete, raised areas showing vesico-pustules at edges. There were superficial ramifying mucous patches on the gums and adjoining mucous membranes.

27.11.44: W.B.C. 16,000, eosinophils 21%. Cultures from the vegetating lesions on scalp gave hæmolytic streptococci, staphylococci and diphtheroids.

7.12.44: Sulphamezathine 36 grammes given over period of five days. Very considerable improvement in general condition and the vegetating lesions on the scalp and in the groins disappeared. The mouth, however, still remained affected.

15.12.44: Scalp condition recurred. 50,000 units penicillin sprayed on scalp over period three days without definite benefit.

28.12.44: Sulphathiazole 36 grammes over five days. Improvement but rapid relapse.

5.1.45: 600,000 units penicillin given intramuscularly over six days with slight improvement only. Vegetating lesions on scalp have recently relapsed. There are ring-shaped blisters and mucous patches on the lower lip and gums are covered with grey, superficial, necrotic epithelium, forming a ramifying pattern.

The President: I have had a number of cases treated with suramin or antrypol, and the improvement was astonishing. I do not say the cases were of real pemphigus. They may have been only dermatitis herpetiformis, but they cleared up in a remarkable way, and two cases of pemphigus foliaceus have done the same. I think antrypol is less toxic than the original germanin.

Necrobiosis Lipoidica, ? Schamberg's Disease.—THERESA KINDLER, M.D., for R. T. BRAIN, M.D.

Male, aged 61, printer. Healthy-looking man. No relevant family history. For ten years slow increase of yellow spots and patches on both shins, without any subjective symptoms. Two years ago he developed hidradenitis in both axillæ. His doctor found sugar in his urine and referred him to hospital.

The front of both legs and feet is largely covered by a lemon-yellow discoloration. It is diffuse in the centre, at the borders merging into spots the size of a pin-head or a lentil. A marbling of telangiectases, minute hæmorrhages, dilated venules produce a mottled appearance. On glass pressure there remains a yellow infiltrate. The epidermis is smooth, thinned, shiny. Scattered over the ankles are tiny red and larger yellow spots. There is a shallow, farthing-sized, depressed, circular scar from an ulcer on the right shin. The rest of the skin and mucosa normal.

B.P. 270/100, pulse regular, artery thickened, tension high. Total blood cholesterol 200 mg.%. Urine: Traces of sugar. Fasting blood-sugar 132 mg.%, after carbohydrate meal 207 mg.%. Patient is controlled on reduced carbohydrate diet, without insulin.

Biopsy (Dr. Loewenberg): In the middle and lower layers of the cutis the collagenous tissue appears in multiple areas as a structureless mass, poor in nuclei, with homogenized, unevenly staining bundles. In Van Gieson's stains the brilliant red collagen bundles are intermingled with yellow ones. The elastic fibres, though well preserved in the upper layers, are partly missing in the more damaged areas, those present are coarse, broken, clumped together. There is a scanty infiltrate round some of the necrotic areas, but more infiltrate in the upper part of the corium, consisting chiefly of lymphocytes and connective tissue cells. Striking vascular changes in all layers; the adventitia thickened. with its layers concentrically arranged, the intima cells swollen, the lumen narrowed, sometimes obliterated. There is bleeding into the tissue and blood pigment is present. With Sudan III some of the necrotic areas are stained a faint yellow; there are scanty red globules between the bundles.

The papillæ and rete pegs are missing, the epidermis atrophic. The epidermis-cutis border runs in a straight line.

The clinical appearance with the symmetrical distribution, extensiveness of the lesions, the red cayenne-pepper-like spots at the ankles would suggest Schamberg's disease, though the ulceration and the definitely lemon-yellow infiltrate are not features of this condition. On the other hand the histological picture, with the necrosis of the collagenous and the damage to the elastic tissue, the vascular changes which are more on the proliferative side than showing dilatation and new formation of vessels, the scanty infiltrate may be pointing towards necrobiosis.

Dr. W. Freudenthal: In my view the diagnosis of Schamberg's disease would be consistent with the clinical and histological aspects of the case.

Leprosy, Mixed Form.—E. W. PROSSER THOMAS, M.D.

Greek seaman, aged 29, unmarried; from the Calamata district. Has been in England periodically for six years. Ten years ago he noticed loss of feeling over the knees, especially the right, then over the thighs, ankles and arms. He has burned himself in various places from time to time. Three years ago he was in hospital at Alexandria with fever of unknown origin. Two years ago a patch of thickening appeared on the inner side of the right ankle. During the past few months nodules have been developing on the face, arms, thighs, and legs. He says his general health is good. No history of coryza or epistaxis.

On examination, the general texture of the skin appears soft and not especially discoloured. Firm nodules of varying size, hemispherical, dull pink, rather shiny, are present on the face, arms, thighs, and legs. Large patch of brown pigmented erythema inner aspect right arm, due (he says) to a burn. Scars over points of elbows and elsewhere, apparently from trauma and burns. Patchy anæsthesia right forearm (flexor surface), and across right ankle, also on thighs. All superficial lymph nodes enlarged. Both ulnar nerves thickened. No organisms found in nasal smears. W.R. negative.

Dr. Stannus has remarked on the diffuse thickening of the forehead above the superciliary arches and of the *peau d'orange* appearance of the skin in these areas, which he considers characteristic.

Brigadier R. M. B. MacKenna: I have seen a moderate number of cases and I gather that the experts in leprosy think that the nasal smear is a very inexact method of testing. I understand that in many cases microscopic examination of a strip taken from the perineural sheath of the ulnar nerve—if that nerve is thickened—is often a more reliable test.

Dr. H. S. Stannus: If the light is thrown on this patient's forehead it will be seen that there is a very mild diffuse infiltration in the supra-orbital region, and I believe I could make a clinical diagnosis on that alone. It has not got to the stage of furrowing.

Dr. Brunel Hawes: In searching for leprosy bacilli I agree that nasal smears are very unreliable. A skin clip taken from the lobe of the ear and the under surface rubbed on a slide will often show bacilli when other tests are negative even though the skin of the ear appears normal. Sometimes a leper may be exuding so many bacilli that a slide pressed on the skin and then stained will show them, and in other cases they cannot be found even after a long search. One negative result is not of much value. I observed one man with nerve leprosy from the start of his illness to his death from carcinoma fifteen years later, and post mortem could not find any bacilli in any of the nodular enlargements of the nerves in his body.

POSTSCRIPT.—The diagnosis was confirmed by biopsy.