of epitheliomatous and pre-epitheliomatous conditions of the skin. This was the view put forward by Professor Bosellini in the paper he read here. I still, however, maintain that Bowen's dermatosis is a distinct entity, and has nothing whatever to do with the superficial erythematoid basal-celled carcinoma so well differentiated by Dr. Graham Little, Dr. Gray, and others. The first case I saw was, I believe, the first diagnosed in this country, and I recognized it from the picture of Bowen's first case; there were three plaques almost identical with that picture. Unfortunately there was already involvement of the glands draining the areas occupied by the patches, and, in spite of extensive removal of these by Mr. E. C. Hughes, the patient eventually died of squamous-celled carcinoma. The lesions in that case were unlike anything else, and could be recognized at a glance. Other cases, however, may not be typical, at any rate by the time the patient is seen by a dermatologist—as, for example, the one from which the sections submitted to-day were taken—and I agree with Mlle. Eliascheff (*Annales de Derm. et de Syph.*, July, 1923, Serie vi^{e}, iv, No. 7, p. 433), who says that it may be impossible, clinically, to make a differential diagnosis between Bowen's disease and some forms of pagetoid epithelioma, but the histology is absolutely distinct. You will see in the sections of the case of basal-celled carcinoma a few dyskeratotic cells lying chiefly in the rete at the upper level of the basal-celled downgrowths, but they are not nearly so numerous or so characteristic as in Bowen's disease, in which large masses of irregularly arranged, dyskeratotic Malpighian cells are seen.

A Case of Vitiligo with Addison's Disease.

By Norman Burgess, M.B.Cantab.

A. A., MALE, aged 33, admitted to Guy's Hospital on August 24, 1925, under Dr. Herbert French, to whom I am indebted for permission to publish this case. Patient had suffered from furunculosis while in the Army; severe attack of influenza at end of 1918.

Present illness dates from October, 1919, when he first noticed dyspnœa on exertion; this progressed, and four years later he began to suffer at irregular periods from nausea, giddiness, exhaustion, faintness and flatulence. These attacks have persisted ever since, with intervals of freedom from symptoms. He has lost 2 st. in weight in the past two years, and has suffered from paræsthesia of the fingers and toes, and general hyperæsthesia of the skin.

In 1915 he noticed a dark area of pigmentation on the left side of the neck, but it was not until 1923 that he found he was becoming generally pigmented. In April, 1924, a patch of vitiligo appeared on the left side of the neck below the original patch of pigmentation. These areas of vitiligo have greatly increased in number lately. In February, 1925, he noticed that small black spots about the size of a pin's head and composed of local dense deposits of dark pigment, were becoming superimposed on the already pigmented skin. None of these spots occurred on areas of vitiligo. At this time the patient was admitted to St. Bartholomew's Hospital with symptoms of hyperthyroidism. He had then a basal metabolic rate of 32 per cent. above the normal. On admission to Guy's Hospital in October, 1925, the skin was deeply pigmented, especially over the lower abdomen and becoming somewhat less so in the direction of the head and feet; the soles of the feet and the scalp were normal in colour. The pigmentation was most strongly marked in the areolæ of the nipples and the scrotum. The lower part of the back was mottled, the light areas corresponding to the summits of hair papillæ. There were also small, irregular deposits of black pigment not raised above the surface. Patches of pigmentation were present on the palate and in the left sclerotic. In addition there were extensive

patches of vitiligo most marked on the left side of the neck and trunk. Springing equally from the leukodermic and pigmented areas were fine downy hairs.

Blood-pressure: 93 mm. systolic; 45 mm. diastolic. Some exophthalmos, and fine tremors of fingers; skin somewhat hyperæsthetic. Adrenalin produced a greater rise of blood-pressure in the patient than in normal persons.

Blood-count: Hæmoglobin 69 per cent.; red cells 3,760,000; colour index 0·92; red cells normal in appearance and fragility.

White cells 6,050: Polymorphonuclears 48 per cent.; lymphocytes 38·5 per cent.; large hyalines 9·7 per cent; eosinophils 2·5 per cent.; basophils 0·5 per cent.; myelocytes 0·75 per cent.

The Wassermann, complement-fixation against tubercle, and Van den Bergh's reactions were negative.

Patient was found to have complete achlorhydria. X-ray examination of the alimentary tract revealed no abnormality. Investigation of the fæces, urine and ductless glands gave negative results. The basal metabolic rate was normal. No shadows were cast by the suprarenal bodies by X-ray. No active disease was found on X-ray examination of the chest. The muscular power of the hands was much below normal, but the muscles did not tire more easily than in normal controls; the electrical reactions were normal, but the dextrose tolerance test gave a result resembling that seen in cases of myasthenia gravis. The lævulose test showed slight hepatic deficiency.

The colour of the skin corresponded to a mixture of blue 3·0, red 5·0 and yellow 3·0 on the tintometer standard scale.

As the patient could not be made to sweat by the hot-air bath alone pilocarpine nitrate $\frac{1}{8}$ gr. was injected. The skin sweated uniformly, the patches of vitiligo sweating as much as the pigmented areas. A mustard plaster applied to an area of vitiligo had no effect on the white patch, but the surrounding area of pigmented skin on which the plaster had overlapped, peeled off later, leaving white skin beneath. This soon became replaced by a fresh layer of pigmented skin, showing that the pigment resided in the superficial layers only. While in hospital the patient suffered from attacks of nausea, giddiness, flatulence and diarrhœa, during which time the systolic blood-pressure was usually between 85 and 95 mm. He had intervals of freedom from symptoms; during these periods the systolic blood-pressure was above 100 mm. He was treated with adrenalin, at first by the mouth and later subcutaneously. The attacks continued and the intervals of freedom could not be ascribed to treatment.

In February, 1926, he began rapidly to lose ground, and, following an attack of tonsillitis, he died on March 19.

Unfortunately permission for an autopsy was refused.

The association of the attacks from which the patient suffered, with a low blood-pressure and pigmentation of the skin and palate, makes the diagnosis of Addison's disease almost certain. The case is recorded because of the rarity of the association of this disease with vitiligo. It seems probable that the hyperthyroidism, from which the patient was suffering in February, 1925, while in St. Bartholomew's Hospital, and traces of which could still be found in October of the same year when in Guy's, was secondary to, and possibly compensatory to, the Addison's disease.

Discussion.—Dr. F. PARKES WEBER said he would have preferred that this case should be labelled "Addison's disease, with hyperthyroidism (or Graves' disease) and vitiligo," because he considered Addison's disease the most important of the three conditions. Vitiligo was a very rare complication of Addison's disease by itself. In this case he suggested that the vitiligo was associated not so much with the Addison's disease as with the hyperthyroidism (or Graves' disease), with which it was not very rarely associated.

Dr. BARBER said that he agreed with Dr. Weber, because hyperthyroidism was associated with sympathetic irritation, whereas Addison's disease was associated with sympathetic

paralysis. In a case of extensive vitiligo associated with alopecia areata which he (the speaker) had investigated with Professor Pembrey, their experiments with a hot-air bath and pilocarpine were more striking than in this case; in their case they had seen a marked difference in the degree of sweating on the white patches as compared with the dark. But it was not always the same; in some experiments the white patches sweated more than the dark. Professor Pembrey explained that by saying that the patient had evidently some lesion of the sympathetic system of the irritative type.

Case of Syringocystadenoma.

By M. SYDNEY THOMSON, M.D.

THE patient, a single woman, aged 34, first attended the out-patient department of King's College Hospital on January 14, 1926. She then complained of an eruption on the scalp, which proved to be psoriasis and rapidly improved under routine treatment.

During examination certain additional lesions were noticed on the trunk. These were diagnosed by Dr. Whitfield as syringocystadenomata, an opinion confirmed by the histological picture. These "spots," of which there are now approximately two hundred, were first noticed by the patient about six years ago, when a large number appeared simultaneously. Four years later a fresh crop was added after an indefinite period of ill-health. Recently, still more lesions have become manifest, whilst all have apparently become somewhat larger and redder, these changes synchronizing with the onset of the psoriasis four months ago. Apart from these facts there is nothing of interest in the history either of the individual or of the family.

The lesions vary in size from that of a pin's head to that of a small pea. Each is slightly raised above the surrounding skin but has produced no clinical changes in the epidermis itself although they are all definitely attached to it. Whilst they are mostly seen as discrete nodules, some are collected into small groups. Occasionally a line is formed, looking like a short string of beads. Although they are widely distributed over the trunk and the immediately adjacent parts of the limbs and neck, they are most thickly aggregated over the lower abdomen. The largest and most luxuriant lesions, on the other hand, are found in the axillæ. They are certainly not follicular in origin nor are they distributed along the lines of cleavage. They do not appear to be related to any particular areas of distribution of the cutaneous nerves.

The sections show an unaltered epithelium, whilst the corium, in the upper part of which the new growth is situated, itself seems to be unchanged except for a slight increase in the density of the fibrous tissue. Those sections which were stained with Pappenheim, and for the differentiation of elastic tissue, gave no additional information. This is contrary to the opinion of Richard Sutton, who holds that the elastic tissue is somewhat reduced in amount although encircling the cysts. Small masses of epithelium are scattered throughout the cutis and tubules. These strands are sometimes wavy and have a definite double row of cells. In other places there are definite cystic spaces which also have similar epithelial walls. Here and there are seen spaces round which the cells are more thickly disposed, those towards the centre then being apparently degenerate. This change may account for some of the material which can be seen within the lumina, and is in agreement with the observations of Theodor Brauns, published in the *Archiv* in 1903.[1] He, too, could find no dilatation of the mouths of the ducts nor any sign of comedone formation. In these particular sections no signs of true sweat-glands were found in the immediate neighbourhood of the growths, and this fact is probably in favour of the hypothesis that they are resulting from the transformation of epithelial rests. Certainly the history of this particular case is very similar to that given by some patients who complain of the sudden appearance of many pigmented nævi.

[1] *Archiv. f Derm u. Syph* 1903, lxiv, p. 347.