character was not defined. The following table gives the day of disease on which the cutaneous hæmorrhages appeared, and the day of disease on which death occurred. In 10 of the cases the hæmorrhages were present on admission; of these 4 were admitted on the fourth day of disease, 1 each on the fifth, sixth, and seventh days, and 3 on the eighth. In 1 case no definite day of onset could be ascertained.

Day of Disease.	Onset of Hæmorrhage Cases.	Death Cases.	Day of Disease.	Onset of Hæmorrhage Cases.	Death Cases.
3rd	2	—	10th	1	6
4th	4	3	11th	2	2
5th	7	—	12th	1	4
6th	9	4	13th	—	2
7th	14	15	14th	—	2
8th	6	8	15th	—	2
On admission	10	—	doubtful	1	1
9th	1	8			

2. *Hæmorrhages from Mucous Membranes.*—Epistaxis, generally of a severe character, occurred in 18 cases. Hæmatemesis (excluding cases in which this symptom depended on swallowing blood from nose), 10 cases. Melæna was only noted in 2 cases, but it is probable that a few more escaped observation. Hæmaturia did not occur.

GENERAL COURSE OF DISEASE.

Apart from the invariably fatal termination of these cases, they presented no absolutely distinctive characters other than those already noticed. They early manifested the toxic effects produced by the disease: extreme pallor, a quiet but very sleepless condition, without seeming discomfort. The temperature was but seldom raised much above normal, and almost invariably subnormal for the last few days of life. Vomiting was a marked symptom in nearly all, the power of the heart rapidly failed, and there was a tendency to anuria, apparently depending upon the last two conditions. Lung complications were infrequent. Of the three mild faucial cases mentioned above, two had laryngeal diphtheria. The third was the only case of the series which recovered; three ecchymoses were present on the extensor surfaces, and were possibly traumatic; the mother stated that the child had always bruised easily. This case was treated with diphtheria antitoxin, coming under treatment on the second day of disease.

Death as a rule occurred within 48 hours of the appearance of the hæmorrhages, 30 of the cases dying within twenty-four hours. In 2 cases, however, life was prolonged until the ninth and eleventh day after the appearance of this symptom. In all cases death was due to cardiac failure, sudden or gradual.

POST-MORTEM APPEARANCES.

Examinations were made in the majority of cases, and in all (with one exception) internal hæmorrhages were present. They were most noticeable in the thoracic cavity, the serous surfaces being the usual seats. The hæmorrhages were frequent in the visceral layers of the pericardium and pleuræ. In the former the posterior and basal cardiac surfaces, and in the latter the anterior and posterior surfaces of the lower lobes of the lungs, were the usual situations. Extravasations of blood were invariably found in the loose tissues around the aorta, œsophagus, and trachea.

Endocardial hæmorrhage was present in one case. The cavities of the heart were frequently dilated, but the myocardium appeared normal.

In the alimentary canal hæmorrhages were found into the lower part of the œsophageal mucous membrane, and into that of the stomach, in the latter situation being sometimes so closely set and numerous as to entirely alter the aspect of the mucosa. In the intestines they were less frequent; being found in the duodenum in 3 cases, and in the Peyer's patches of the ileum in 2. In only 2 cases did they occur in the peritoneum.

The kidneys were rarely affected, but subcapsular extravasations occurred in 2 cases, and in 1 there were small hæmorrhages into the calices. The spleen and liver invariably appeared normal.

Hæmorrhages into the muscles were of frequent occurrence, and, when these had been superficial, were the cause of ecchymoses noted during life.

BACTERIOLOGICAL EXAMINATION.

Bacteriological examination of the fauces was made in the last 11 cases of the series, including the 3 mild faucial cases above referred to. In 5 almost pure cultures of the Klebs-Loeffler bacillus were obtained. In the remaining 6 large numbers of these bacilli were present, but associated with staphylo- and streptococci, the former more numerous. Diplococci were present in 1 case, single cocci in 2 cases, and short thick bacteria in 3.

TREATMENT.

The cases were treated on ordinary principles, and in addition in 12 (including the recovery) the antitoxin treatment was carried out. Six, however, of these cases were admitted either moribund, or so far affected by the toxic products of the disease as to preclude all hope of recovery. In 3 cases local and temporary constitutional improvement followed the injection of the serum; in these 3 the membrane had entirely cleared from the fauces before death.

REMARKS.—Hæmorrhagic diphtheria presents analogies to hæmorrhagic varieties of the other specific fevers tending to rapidly fatal issue, profound changes in the blood being set up by the circulation of toxic products. In diphtheria, however, the disease being primarily local and general manifestations secondary, it is not surprising that the course is more prolonged. Degenerative changes in the blood vessels have been described by Oertel as occurring, and may determine the seat of hæmorrhage, traumata, too slight to cause extravasations under ordinary circumstances, being in some cases the exciting cause.

A CASE OF PITYRIASIS RUBRA TREATED BY THYROID TABLOIDS.

By WALTER SCATCHARD, M.R.C.S.ENG., ETC.,
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W., aged 72 years, a woman of active disposition, possessing a good previous history, with the exception of being totally deaf and more or less dumb owing to an attack of scarlet fever when a child, and whose family history was free from rheumatism or gout, began in December, 1893, to suffer from redness and scaliness of the skin of legs and arms, accompanied by itching.

Her symptoms increased in severity, until on August 19th, 1894, she was persuaded to take medical advice. Her general health appeared normal in every way. She complained of no pain, but of intense itching, which had produced some irritability in her naturally amiable disposition. The skin on the legs and forearms presented large patches of redness, and thickening, over which were numerous large flat translucent scales, which became easily detached. There was no discharge. This condition increased in severity, and on October 5th, 1894, the skin over the whole of the body was more or less affected, with the exception of the cheeks; and wherever she went she left signs of her presence by a considerable sprinkling of scales. About this time her general health began to give way, and her appetite to fail, causing her to lose flesh and to become very much depressed. The treatment up to this time (October 5th) had consisted of local applications of eucalyptus ointment, lotio plumbi subacet. dil., oatmeal water, and ichthyol "Unnaeloth," with the internal administration of the following drugs: iodide of potassium, salicylate of sodium, perchloride of mercury, and arsenic. The arsenic was pushed until she took πx of liquor arsenicalis *B.P.*, three times a day. None of the above drugs had the slightest effect in curing the patient.

On October 5th, 1894, I put her upon thyroid treatment, beginning with half of one of a 5 gr. thyroid tabloid (B., W., and Co.'s), to be taken daily after her dinner, and ordering her to lie down as much as possible (she refused to go to bed). Her pulse at this time was 114, small, and compressible. I increased the dose of thyroid by one tabloid every

two days, watching carefully her pulse and general condition, until, on October 13th, she was taking four tabloids daily.

The effect of this treatment was remarkable. On October 17th (that is, twelve days after commencing the thyroid treatment) she began to show decided signs of improvement, which improvement continued without a break until, on December 24th, 1894, the skin presented its normal appearance, with the exception of a slight tendency to a fine branny desquamation in some parts. On January 8th, 1895, even this had quite disappeared, leaving the skin quite normal in appearance. She ceased to take the tabloids on November 12th, 1894, but as there were slight signs of the pityriasis returning, on December 9th I ordered her to take one tabloid daily. Her skin now (January 12th, 1895) looks quite normal, with the exception of slight patches of eczema on the ankles, which under local treatment are improving. The thyroid treatment seemed to have no effect on the eczema, and the itching still continues, though it is much less severe.

Her general health suffered considerably under the thyroid treatment. She became much emaciated, depressed, anæmic, and short of breath (owing to heart failure), but these symptoms soon passed off upon ceasing the tabloids and giving strychnine and wine.

THYROID MEDICATION IN ICHTHYOSIS.

By ATHELSTANE NOBBS, M.B.,
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THE case which is represented in the accompanying photograph is one of typical ichthyosis in a man who was admitted into the County Asylum, Morpeth, on August 24th, 1891, suffering from general paralysis. The history of the patient, a nomadic Irishman, aged 46, was unfortunately unobtainable, though he stated that he had suffered from this skin disease all his life. It is not my present purpose to do more than indicate the lines of treatment adopted for the cure or improvement of the ichthyotic affection, and to advert to certain results obtained from its use.

Fig. 1

Towards the end of October, 1893, I commenced by giving the patient 10 minims, thrice daily, of extract of thyroid gland, the preparation of a local firm of manufacturing chemists. It was at this time that photograph No. 1 was taken, and it represents with great faithfulness the then appearance of the man's left foot.

The following brief notes, taken at the same time will serve as a general description of his condition: "Hair on

scalp is iron grey, wiry, sparse, and dry, the skin showing through it. Scurf is readily shed. Face is pitted with old small-pox. The skin is universally very dry, even in the perineum and axillæ. Over the trunk it is desquamating in large flakes. On the elbows, wrists, knees, ankles, and on the dorsum of the metatarsal and metacarpal regions are numerous dingy, greenish squames, varying from the size of a lentil to almost that of a threepenny-piece. These are firmly adherent, and when forcibly detached leave a dry, white scaly base."

The patient being very ataxic and much palsied, he was treated in bed. The extract was administered for about seven weeks, but unfortunately through some misunderstanding was discontinued. Three weeks later it was resumed, and improvement, which at first had been barely appreciable, became marked. The strength of the extract used was 1 in 3, so that the patient was only receiving the equivalent of 10 grains of thyroid gland. This line of treatment was continued until the middle of March, 1894, when as an experiment tabloids of the gland in a dried state were substituted. The dose was likewise increased to the equivalent of 10 grains of the gland thrice daily, and was broken up among food. Exactly a month later a note was made to the effect that improvement was marked. Shortly thereafter Photograph No. 2 was taken, and the change for the better is evident.

Fig. 2.

On September 1st 1894, treatment was suspended. Except for a somewhat dry condition of the cuticle and a faint scalliness on the exposed surfaces of his joints cure might almost be said to have been effected. The skin of the hands, notably, was as soft as that of a child. The patient was now allowed up for increasing periods daily, but whether because of the cessation of the stimulating thyroid treatment or because the effort of being up after so long a rest in bed was too much for him he showed signals of distress, and ten days later went back to bed, the tabloids being resumed.

Apart from the marked benefit to the ichthyosis there can be no doubt that his general health while under this special treatment improved. His appetite became better, his facial expression brighter, and for a time at least his personal habits altered in the right direction, but his graver malady, the general paralysis, pursued its usual progressive course, though the deterioration was decidedly slow. Although the latter remarks may be very wide of the subject of a skin affection the facts to which I have alluded may possibly be not altogether devoid of interest.

At present the dosage is being gradually diminished as the possibility of impairment of the cardiac function consequent