of as the only possible shelter, so the patient, with the cut pieces, was wrapped in an old mat and brought to Kalewa to die.

On arrival in the hospital he was cold, air-hungry, extremely pale and pulseless. He was conscious, but unable to speak.

A CASE OF AGRANULOCYTIC ANGINA.

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SCHULTZ in 1922 described a form of angina with necrosis of the tonsils and pharynx associated with a decided leucopenia, especially of the granulocytes. He classified this symptom-complex as a separate disease which he called "agranulocytosis." Since then more than 120 cases have been recorded under this name. Heuper has reported five cases between November 1927 and April 1928, while more recently Bocage and Filliol have described a fatal instance of agranulocytosis in a case of syphilis.

The ætiology of the condition is unknown, though most investigators are agreed in regarding it as an infectious disease of a septicæmic nature "with an atypical reaction of the hæmopoietic system due either to bacteria with a special affinity and toxicity to the granulocytic system or to an atrophy and aplasia of this organ caused by septic infection." In the case reported by Brocage and Filliol they found at necropsy the characteristic changes in the bone marrow cells described by Schultz, along with a large number of a Gram-positive micro-organism resembling *B. perfringens.* It has not been possible to incriminate one particular bacterium as to the cause of this disease since other organisms such as *Streptococcus hæmolyticus, B. pyocyaneus,* etc., have been isolated in other cases where the same group of symptoms going under the name of "agranulocytic angina" was manifested.

The disease usually affects the middle-aged and is more common in women than in men. It often starts suddenly in previously healthy people. It also occurs in debilitated individuals after a period of prolonged ill-health, as in the case of Bocage and Filliol, where the necrotic pharyngitis started in an anæmic man after a course of N.A.B. and bismuth injections. It is accompanied by high continuous fever, dysphagia and dyspnœa. The tonsils are enlarged and hyperæmic and subsequently become necrotic. The pharynx and lingual tonsils may also suffer the same fate. Sometimes the necrotic process is found in the tongue, gums, anus, vulva, vagina and cervix. The chief characteristic is the blood picture which shows considerable leucopenia, the granulocytic cells being the first to diminish. Prognosis is gloomy in the extreme though not absolutely hopeless.

I am reporting the following case because it was very suggestive of agranulocytic angina:—

An Anglo-Indian male, aged 20 years, was admitted as an in-patient in the Government Head-quarters Hospital, Coimbatore, on 20th November, 1928, for high fever and difficulty in swallowing. He had a temperature of 102°, pulse 98, and respiration 28. The inside of the mouth presented a very unusual appearance. Both tonsils were enlarged, almost greenish blue in colour owing to evident necrosis. The posterior wall of the pharynx was also in the same condition, while there was a patch of submucous hæmorrhage over the palate and uvula. There was bleeding from the gums as well as the tonsils. There was no enlargement of lymphatic glands. Examination of a throat swab revealed the presence of long-chained *Streptococcus hæmolyticus* and no diphtheria bacilli. The blood showed marked leucopenia. The leucocyte count was below 1,500. There was relative diminution of polymorphonuclears. There was no enlargement of the lymphatic glands. The spleen and liver were not palpable.

On the second day the temperature went up to 104° and dysphagia was so great that it prevented the patient from taking even liquids. He also developed purpuric eruptions all over the body and complained of pain over the bones of the thighs and legs. The condition was decidedly one of a severe form of septicæmia. He was put on to injections of anti-streptococcal serum, calcium by the mouth, calcium by injection and stimulants such as glucose and brandy. After oscillating between life and death for some days, the patient began to improve, the temperature came down gradually, accompanied by slow separation of sloughs from the tonsils and pharynx. The temperature touched normal on the 16th day and the patient was discharged from the hospital on 13th December, 1928.

On making enquiries about the patient two months later we were reliably informed that the patient developed the same symptoms in a more virulent form some fifteen days after being discharged from the hospital and succumbed to the disease in the course of two days.

The possibilities in this case are aleukæmic leukæmia and agranulocytic angina. Diphtheria is ruled out because of the negative throat swab and fatal relapse, which is an almost unknown phenomenon in diphtheria. Against aleukæmic leukæmia, we have the absence of enlargement of the liver and spleen and lymphatic glands. Besides the duration of the disease is too short even for acute leukæmia.

The characteristic signs which suggest strongly the possibility of agranulocytosis are the necrotic condition of the tonsils and pharynx, bleeding from the gums, purpuric eruptions, pains over the long bones and high continuous fever associated with a blood picture of distinct leucopenia, especially of the granulocytes, and a fatal relapse occurring a few days after the termination of the primary attack.

UNUSUAL SYMPTOMS IN A CASE OF ROUND-WORM INFECTION.

By S. S. PATTANAIK, L.M.F. (Cal.),

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A SHORT time ago I was called in to see a patient in a village.

On visiting the place, I examined the patient. He was a boy about 10 years old, neither well nourished nor well developed. He had been suffering from purging and vomiting for the last two days and was in a condition of extreme prostration. He was very restless and was slightly delirious. He complained of a rather dull aching pain in the abdomen. Being a boy of only 10 years, he could not give a full account