Ultra-violet rays are then applied to the skin surface in sufficient dosage to produce a mild degree of erythema; blistering must not be caused. It is advisable to divide the body-surface into six areas and to treat each of these individually; the best distribution of the rays is thereby ensured. After the light treatment, the patient spends half an hour to two hours in a bath of water maintained at about 95° F.; during this time scales are removed by rubbing. After the bath a thick coating of ointment is again applied to the affected areas, and still another application is made at night. Autohaemotherapy (10 c.c. of whole blood) is given at two-day intervals for 5 doses.

This combined procedure is continued daily until scaling has ceased and there is little or no induration in the plaques. The period of hospitalization for intensive cases is about two weeks. Tar ointment is not very suitable for use on the scalp, and for this area an ointment containing 5 per cent each of ammoniated mercury and salicylic acid can be used.

In one series of 2,000 cases in which this treatment has been used it is claimed that in approximately 15 per cent the disease has not returned. According to Sulzberger and Baer [3], Keim has modified the regime as follows in order to avoid hospitalization:

The patient applies crude coal-tar 2 to 10 per cent in acetyl alcohol emulsion base to all affected parts before retiring. The next morning a tar-bath is taken. Later, during the day, the areas are painted with liquor carbonis detergens (U.S.P.), which roughly corresponds to liquor picis carbonis (B.P.). Immediately after this painting, the patient is exposed to ultra-violet light. This modified regime has to be continued for four to eight weeks in most cases.

REFERENCES.

NEUROPARALYTIC ACCIDENT FOLLOWING ANTI-RABIC VACCINATION.

By Captain E. G. H. Koenigsfeld,
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A case seen in a military hospital in South India presented a different type of neuro-paralytic accident from that reported by Lieutenant-Colonel Imrie in the Journal of the Royal Army Medical Corps, October, 1944.

Lieutenant-Colonel G. B., aged 43, service twenty-three years, was bitten by a dog on January 1, 1944. Anti-rabic vaccination was started at once. 10 c.c. of anti-rabic vaccine were given daily for fourteen days. During the period of vaccination he took some alcohol— in very moderate doses— against medical advice.

The vaccine employed was a 5 per cent suspension of sheep brain (Paris strain of fixed virus) in carbol-saline, prepared by Semple’s method. Immediately after the last injection the following symptoms were recorded by the patient—

Severe headache, pains and paraesthesiae in thighs and arms, blurred vision, restlessness and complete insomnia.

He was examined at the Government Hospital, Ootacamund, from which he was admitted to the British Military Hospital, Wellington, on January 26, 1944. At the Ootacamund Hospital optic neuritis and absence of abdominal reflexes were found.

On admission to the British Military Hospital:

An officer of 43 years of age, of excellent physique. Vision very hazy, right eye 6/6, left eye 6/9. Knee-jerks and Achilles tendon-jerks were rather brisk, the gait was somewhat
spastic, but plantar response was of the flexor type. Babinski's and Gordon's signs were not clearly present. Abdominal and cremasteric reflexes were elicited.

Romberg's sign was positive and some tremor of the hands was present. There was marked hyperalgesia of the muscles of the calves and thighs, paraesthesia and numbness of both legs.

The patient was very restless and showed signs of severe anxiety but was mentally alert. He was completely sleepless in spite of strong hypnotics. Bladder and rectum functioned normally.

There was no fever; the pulse was 65 to 75; B.P. 125/80.

The fundus examination showed a retrobulbar neuritis of both eyes. During the following days his vision deteriorated steadily, and on February 3 he was almost completely blind in both eyes. But from the end of the second week of his stay in hospital his vision began to improve gradually. By the end of February his eyesight was almost normal but still hazy.

The pains in his legs at that time were almost gone, but all sensations in the lower extremities were diminished and he had a feeling of numbness and heaviness in the legs. Romberg was then still positive. The gait was rather ataxic. Knee-jerks and Achilles tendon-jerks were normal. Babinski negative.

General condition and sleep were much better by then, but Mist. 3/15 had still to be given in full doses two to three times a day.

Slight massage was started during the last week of February—no lumbar puncture was performed.

Further treatment consisted in injections of vitamin B<sub>1</sub>, 50-100 mgm. a day, cod-liver oil and liver extract.

By the end of the first week of March the patient had further improved—he still complained of slightly blurred vision. His general condition was satisfactory, he slept better and had no pains in his extremities. There was still numbness of both feet and gross diminution of all sensations in the legs. The gait was still unsteady, and patient had to use a walking stick. However, he was considered to be well enough to be discharged from hospital, and made a complete recovery during the following six months. He was fit for Category A when seen in February, 1945.

It is noteworthy that the main feature of our case was optic neuritis. As far as we are aware this condition has never been described so far, although there is no reason why the optic nerve should not be affected as well as other cranial nerves.

This case probably should be described as a neuritic type of paralytic accident although the temporary loss of the superficial reflexes, the spasms, the anxiety, the sleeplessness and restlessness suggest an affection of the spinal cord and higher centres as well.

In a number of cases it may be impossible to differentiate a peripheral neuritis from pathological changes in the central nervous system, and both may exist together.

The question of the aetiology and classification of neuroparalytic accident has been aptly discussed by Colonel Imrie in his article.

Perhaps the inclusion of paralytic rabies in the classification of neuroparalytic accident should be questioned. It is an infection in spite of proper vaccination, a hydrophobic condition not prevented by treatment and not caused by it.

If ever Negri bodies have been found in cases of paralytic rabies after treatment, as Colonel Imrie believes, this would be a definite indication that this group should not be regarded as neuroparalytic accidents.

Negri bodies are an essential feature of genuine rabies and have not been found in cases of neuroparalytic accident.

[Although not reported in literature we are aware of one other case where an optic neuritis was ascribed to the effects of anti-rabic vaccination. This case, also, recovered completely.—Ed.]