

urine—probably resulting from general heightened blood-pressure. (2) Spartein, with diminished secretion—in health at least. (3) Strophanthin causes slight temporary contraction, with no marked increase of secretion. (4) Apocynin, similar temporary contraction, and no definite increase of secretion. (5) Turpentine, (6) adonidin, and (7) varium chloride give similar results.

In conclusion, it seems to us that the plethysmographic method of experimentation is a valuable one for determining the exact action of drugs on the circulation, and one that deserves more attention than it has hitherto attracted.

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## NON-TUBERCULATED LEPROSY WITH LOCAL ASPHYXIA BETWEEN THE ANÆSTHETIC PATCHES.

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LEPROSY, as is well known, furnishes frequent and typical examples of the various trophic lesions so often discussed in Europe. It is, however, in connexion with the more obscure condition known as local asphyxia, or Raynaud's disease, that I venture to relate this case. It is unique in my experience of leprosy, and derives additional interest from the fact of its occurring in a fair-skinned, intelligent European.

Chevy A—, aged forty-five, born in France, was admitted to the Trinidad Leper Asylum on May 19th, 1883. He had served in the Crimea and in various other parts of the world. I examined him from time to time, and was surprised to find how little progress the disease was making. Beyond localised areas of anæsthesia in the extremities, there was no evidence of leprosy. The anæsthetic skin was at this time of exactly the same colour as the unaffected skin. He was an active man, constantly employed in making boots or in work about the asylum. On returning from Europe in September, 1886, I was, however, struck by a remarkable change which had taken place during my absence. The following are the notes then taken.

Oct. 1st, 1886: The anæsthetic patches are of the normal white colour; all the rest of the skin is of a dusky red. On pressure with the finger the congestion disappears. On drawing the nail across the skin the dark colour vanishes, then reappears, and afterwards a distinct bright-red wheal is observed in the line of the finger. He says the congestion disappears when bathing in the sea. He complains of much pain in the limbs, especially in the palms of the hands. The fingers are anæsthetic, and becoming stiff.—25th: He has been trying friction with gurgun liniment, but says the fingers are stiffer and more painful. The left median nerve was therefore stretched under chloroform. The nerve was found to be thickened. Some juice was collected from the exposed nerve on a cover glass and examined with magenta, but no bacilli were found.—29th: He says there is a sleepy feeling in the palm of the hand in place of the anæsthesia. When tested with the eyes shut, he refers the impact of a substance to one side of the point actually touched.—Nov. 12th: Now that the rain is falling, the colour of the skin between the taches has turned to a dusky reddish blue. He says the fingers feel cold, and that sometimes the skin is almost black during the rains. There is now no change whatever in colour or sensation in the parts supplied by the median nerve operated on.—Feb. 14th, 1887: He has been rubbing the arms with a 10 per cent. solution of ichthyol in olive oil. The dark colour is a little lighter, but there is no change in the anæsthesia.—March 14th: The congestion of the skin is almost gone. Has had dysentery for the last month. Complaints of a cold sensation in the abdomen.—April 16th: He has been losing much bright blood from the bowel lately. Is found to have a prolapse of the rectum, with congested ulcerated surface. He was given chloroform, and the lower two inches of the rectum were drawn down and everted. The mucous membrane was cauterised linearly in the long axis of the bowel with a black-hot wire. It was then rubbed over with fuming nitric acid and tannin applied.—29th: Since the operation he has passed a good deal of blood from time to time. This has been checked by injections of nitrate of silver and of

opium, and by turpentine by the mouth. The violet colour between the taches on the upper extremities has gone, leaving dusky-red patches.—May 4th: Sitting up; walked yesterday. Had diarrhoea, but no more blood. To repeat turpentine.—6th: Has passed hardly any urine since last night. About four ounces of clear urine, smelling strongly of turpentine, were drawn off by catheter. Burning sensation over bladder.—18th: Has had fever every day at noon lately, which was relieved somewhat by ammonium picrate. Urine high coloured; a trace of albumen. Edema of hands and feet. Frequent diarrhoea, but not much blood. Looks better in face.—19th: Died at 2 P.M.

The necropsy, next day, showed an enormous liver, weighing 83 oz., and containing five distinct abscesses; the total amount of pus was estimated at from two to three pints. Weight of spleen 18 oz.; simple hypertrophy. Weight of kidneys 9 oz.; cortices somewhat thinned and granular on surface. Aorta very atheromatous. No recent hæmorrhage or ulceration was found in the rectum, the ulcers appearing to be cicatrised; but the rest of the large intestine was invaded by numerous more or less circular and sharply defined ulcers. The median nerves were thickened, but no difference was found between that which had and that which had not been stretched. The right cervical sympathetic and ganglion of the vagus were dissected out, but no change was found. Sections also showed no change under the microscope. Magenta showed numerous cells in the median nerve, staining very dark, and apparently stuffed with bacilli, also some free bacilli. Numerous bacilli, both free and in cells, were found in a scraping from the superior cervical ganglion of the sympathetic.

This case revealed a mass of morbid anatomy, hardly an organ being sound. The condition of the skin, however, is the chief point of interest. The strange feature in the case is the appearance of the congestion between the taches four years after the onset of the anæsthesia. Was this due to a fresh increase of bacilli in the mixed nerves, leading to invasion of the sympathetic fibres? But if so, why is this condition not more common, for the thickened condition of the median is common enough in leprosy, as also the discovery of bacilli in the affected nerves. I thought, therefore, that possibly a dissection of the cervical sympathetic might throw some light on the matter. No naked-eye change was found, but the microscope showed numerous bacilli in a scraping from the superior cervical ganglion. This is in contrast to results obtained in the cerebro-spinal centres; I have failed to find bacilli in brain or cord, nor has their occurrence there, I believe, been recorded. The disappearance of the congestion after prolonged hæmorrhage from the bowel was a point of interest. Whether the connexion was sympathetic or more direct I cannot say. Altogether the case struck me as presenting a remarkable resemblance to the earlier stages of Raynaud's disease, and as being sufficiently obscure and rare to place on record.

Trinidad.

## Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND  
THERAPEUTICAL.

### CASE OF TRACHEOTOMY.

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THE following case presents several points of interest, and is, I think, worthy of record.

J. C—, aged seventeen months, was first seen on January 22nd, 1886, complaining of symptoms of laryngitis, with absence of the typical cough. The child had been ill for six days, the mother stated, but to-day she had observed some difficulty in breathing, which caused her some alarm. Pulse 120; temperature 101°. No cervical swelling, and no exudation on the fauces or tonsils. The usual remedies were resorted to, and were continued until January 26th, when the child had a severe spasmodic attack, with obstruction to the breathing, lasting for half an hour afterwards. Tracheotomy was advised, and in this Dr. Beatson concurred. The operation, however, was delayed, as the child