of tightness in the chest; these are all temporary and are combated easily.

After operation

Headache.—This is a distressing symptom and may be transitory or may continue for even three or four days. The headache varies in different cases and is seen more commonly among nervous patients, particularly those of the educated class, but less often amongst the uneducated, but more hardy, ryot. This headache is supposed to be due to low cerebro-spinal pressure caused by leakage through the puncture in the theca. This low pressure removes the cushion-like support from the base of the brain, which in turn presses upon the basal veins resulting in anæmia of the brain causing headache. To combat headache, we carry out the following treatment in all cases of lumbar anæsthesia, the moment headache is complained of: We raise the foot of the bed 10 or 12 inches thus attempting to keep the lower end of the spinal canal empty to prevent further leakage. Intramuscular injection of adrenalin chloride, 10 minims, is also useful. Pyramidon in 10-grain doses, repeated in six hours, if necessary, relieves headache in many cases. In one case, a second lumbar puncture gave instantaneous and permanent relief.

Temperature and rigor.—In some cases there are rigor and rise of temperature. This comes on two to six hours after the operation and the temperature drops abruptly in a few hours.

Acute dilatation of the stomach.—This sometimes occurs a day or two after the operation and it has given us more anxiety than any other symptom. The treatment consists in recognizing the condition and instituting immediate treatment. The patient becomes restless, with very feeble and frequent pulse, and pallor and distension of the upper abdomen with respiratory distress sometimes accompanied by vomiting of slightly greenish fluid. Treatment consists in passing a small-calibre stomach tube through the nostril, emptying the stomach of all its contents, gently washing with saline, and leaving the tube in place for drainage until the tonicity of the stomach returns. The prone position is essential in all cases. One cubic centimetre of pituitrin given intramuscularly every three hours is a great aid. Rectal and intravenous salines are helpful in restoring fluid loss if much vomiting has occurred.

A Mirror of Hospital Practice

A CASE OF ENDOCARDITIS TREATED WITH POLYVALENT ANTISTREPTOCOCCUS SERUM

By R. N. CHOPRA, M.A., M.D. (Cantab.)
LIEUTENANT-COLONEL, I.M.S.
R. CHOUDHURY, M.B.
and
B. SEN, B.SC., M.B.
(From the Department of Pharmacology, School of Tropical Medicine, Calcutta)

S. D., a Hindu female aged 25 years, was admitted under the senior author (R. N. C.) into the Carmichael Hospital for Tropical Diseases on 12th April, 1933, suffering from intermittent fever of a hectic type.

History of present illness.—The patient had a sudden attack of fever about 3 months before admission and had been getting it ever since. For the first month fever used to come every second or third day, but later it came on daily. During the second month she had suffered from alternating pains in different joints. There was no swelling of any joint and the pains subsided spontaneously. During the early part of the third month, she developed a rash on the body, which however subsided, but the fever continued as usual. She was treated outside the hospital for malaria, tuberculosis and '*B. coli* infection' by different medical practitioners, but the fever could not be controlled.

The patient had previously always possessed good health. She has had 3 children one of whom is dead.

Condition on admission.—The patient looked ill and had an anxious expression. She was anæmic with a yellowish tinge of the skin. There was a daily rise of temperature to 103° or 104°F. with a chilly sensation but no rigor.

Physical examination revealed the apex of the heart in the 5th left intercostal space in the midclavicular line. There was no thrill but a soft systolic murmur was heard localized at the mitral area. Heart beats were irregular there being definite missing of beats at long intervals, showing partial heart block. The pulse rate varied from 60 to 80 per minute; pulse compressible, volume fair. Blood pressure was s/d -85/40 mm. of Hg. There was no cyanosis, dyspnœa, venous engorgement, œdema or petecheal hæmorrhages. The lungs were clear, the abdomen soft and the liver and the spleen were not enlarged. Knee-jerks were normal and there was no urinary trouble. An examination *per vaginam* showed no pelvic abnormality.

Laboratory findings.—Blood—hæmoglobin 70 per cent, red blood cells—4,120,000, white blood cells—15,000. Differential count—polymorphonuclears—72 per cent, small mononuclears—21 per cent, large mononuclears—2 per cent, and eosinophiles—5 per cent.

No malarial parasites were found in the peripheral blood and blood culture for malaria was negative. The blood culture for bacteria was negative after 72 hours on two occasions. Wassermann reaction, Widal, Aldehyde and Antimony tests were all negative. Agglutination against *M. melitensis* was negative. Blood calcium and blood sugar were normal.

Urine.—There was no abnormality in the urine. A culture from a catheter specimen showed staphylococcus albus only.

Stools.—No ova or protozoa found; culture showed *B. pyocyaneus.*

Throat.—No hæmolytic streptococci found.

Electrocardiogram reports.—As the cardiac condition of the patient was peculiar electrocardiograms were taken at intervals. The results are given below:—

15th April, 1933.—P—R interval of 0.16 secs. which is probably a little high for Indians. T wave inverted. Slow heart rate possibly due to vagotonic action and myocardial degeneration.

24th April, 1933.—P—R interval 0.18 secs.; T wave flat but not inverted showing slight improvement in myocardial condition. Missing of heart beats clearly shown.

5th May, 1933.—P—R interval 0.18 secs.; heart rate 75 per minute. P wave normal size and contour. T wave upright, normal contour. Condition of myocardium shows improvement.

29th May, 1933.—P—R interval 0.18 secs. normal; P wave normal. T wave flat in lead II; R bifurcated in lead III. Indication—myocardial degeneration.

Treatment.—To start with, the patient was ordered absolute rest in bed and no medicine was given except a diaphoretic mixture, while preliminary investigations were being carried out.

After 4 days the pulse was observed to be getting slower and more intermittent. The patient was considered to be suffering from rheumatic endocarditis of a subacute type with partial heart block. She was put on sodium salicylate 15 grains 3 times daily but there was no effect on the temperature or pulse with this treatment after 7 days. Larger doses could not be given as the patient used to sweat profusely and feel depressed after administration of salicylate.

She was put on potassium iodide and liquor hydrargyrum perchloridum mixture which was continued for one week. For three days after this mixture was started there was no fever but the pulse remained about 60 and occasionally intermittent; the systolic bruit continued. On the fourth day she had fever again. For the next 3 days again there was fever, the condition of the pulse remaining unchanged. This was followed by a sudden sharp rise of temperature to 105°F. with a pulse rate of 68 per minute and the patient had to be given sponging and an iced saline per rectum. The iodide mixture was omitted and sodium salicylas gr. xv t.d.s. was started again. Next morning the temperature came down and the patient was in a collapsed condition; she was cold and clammy, temperature 96°F., pulse 50, respirations 24. She looked dazed and toxic, she was kept warm and stimulants were given. At this stage the patient started getting fits of unconsciousness resembling Stokes-Adam's Syndrome. As all the other treatments had failed she was given an injection of 10 c.cm. of polyvalent antistreptococcus serum intramuscularly. This improved her condition and the injections were repeated every other day till 60 c.cm. of the serum were given.

The temperature has remained normal since that time and the patient has felt better and has steadily improved. The pulse has also become quite normal in rhythm and is no longer intermittent. Later she was given hæmatinic treatment and after a prolonged rest in bed was allowed graduated exercises. She was discharged later.

Condition on discharge from the hospital.—Hæmoglobin 80 per cent, pulse 80 per minute, regular. Temperature normal. No symptoms. Apex of the heart—normal position, though a faint systolic murmur can still be heard. Skiagram showed no enlargement of the heart.

Remarks

1. The case was clinically one of carditis involving both myocardium and endocardium, chiefly the latter with partial heart block.

2. Although streptococci were possibly the cause, the septic focus being probably in the heart, they could not be isolated from the blood, throat, urine or elsewhere.

3. The treatment with sodium salicylate, atropine and potassium iodide appeared to do little good. The condition of the patient however started to improve rapidly after injections of polyvalent antistreptococcus serum. There was no rise of temperature after the first injection. Whether the serum acted in a specific or non-specific manner is difficult to say.

A CASE OF HICCOUGH CURED WITH APOMORPHINE HYDROCHLORIDE

By K. N. DUTT, L.S.M.F. (Punjab), L.O. (Madras)

In-Charge Civil Dispensary, Bahadurgarh Rohtak District, Punjab

THE patient, a school inspector, consulted me with the complaint that he had been troubled with a hiccough for the past three days.

I gave him a hypodermic injection of apomorphine hydrochloride gr. 1/10 the same evening. Soon after the injection he felt slight giddiness and nausea. He fell asleep in an hour's time and awoke in the morning with his hiccough gone and apart from a few short attacks during this day he has had no further trouble.

A CALCULUS IN THE TONSIL

By S. C. SARKAR, M.B.

Assistant Surgeon, Walsh Hospital, Serampur

A MAN, aged about 45, came to the hospital for the removal of a fish-bone from his throat. I introduced my finger and felt something hard in the tonsil but could not detect any fish-bone. I then introduced a pair of crocodile forceps, guiding them by my finger which I kept in position. I found a rent in the tonsil and that a foreign body was lodged inside this hole. I grasped one edge of the rent with a toothed forceps and tried to remove the foreign body. After several efforts I was successful and I found that it was a calculus about the size of a big pea, black in colour and very hard. The man was completely relieved after the operation.

Calculi in the salivary glands and ducts are fairly common but I can find no record of one being formed in the tonsil.

INSANITY TREATED BY SULPHUR INJECTION

By K. K. SEN, L.M.P.

Narhan, Darbhanga District

History.—A Hindu male, 25 years of age, suffering from insanity of manic-depressive type, was brought for treatment a few months after the onset of the disease.

The attack was reported to be the second one, the first having taken place about two years previously, and it only lasted for a short time.

There was no history of venereal disease or addiction to any intoxicants. There was no family history of insanity.

Physical examination did not reveal anything particular excepting that the patient was debilitated.

Treatment.—'Sulfosin-leo'—prepared freshly by rubbing 1 per cent sulphur sublimate in pure olive oil and dissolving it at a temperature of 100°C.—was injected deeply on the outer side of the thigh at the junction of the upper and middle thirds, according to the recommendation of Major J. E. Dhunjibhoy, I.M.S.

Dosage.—The first dose was 1 c.cm. and the drug was injected bi-weekly the dose being increased by 1 c.cm. at each injection.

The maximum dose injected, however, did not exceed 4 c.cm. as that amount was sufficient to produce the desired pyrexia.

General treatment.—Fresh and nourishing food, baths, fresh air, occasional injections of hyoscine gr. 1/100 with morphine gr. ¼ and atropine gr. 1/100.

Progress.—The temperature used to rise to 102°F. to 104°F. within twenty-four hours of each injection.

Pain was severe at the sites of injections.

Altogether six injections were given the maximum dose being 4 c.cm. and the man completely recovered.