diagnosis is certain, that she did have malignant tertian malaria as the microscope showed it, and as equally is it certain that the enterococcus infection did exist, since the culture—and more the results of autovaccine treatment—proved. The question of kala-azar still remains undecided. The characteristic double rise of temperature has always been suggestive, and the leucopenia and the mononucleosis might plead for it, but yet the Stiburea did not produce any effect. And more, the laboratory examinations gave negative results, both the smear of the liver puncture and the culture of the blood too. Even the "gel test" was negative. It might be said perhaps that a smear of the splenic puncture could have been examined for kala-azar bodies, but is not the liver puncture of equal significance?*

Might I venture to point out that cases coming in with enlarged spleen and liver even in an endemic locality like Madras should still have to be confirmed by actual bacteriological examination or positive microscopic examination before being denominated "kala-azar" and being treated as such and such alone? I hope that the observations made and the results of treatment adopted in the case quoted, are aid enough to my presumption. And I also believe that this report of the case will throw some light on the significance of cultural examinations to be resorted to as routine practice wherever facilities exist.

My thanks are due to the authorities of the Government Royapuram Hospital, Madras, for having permitted me to publish this case and to Dr. V. C. Govinda Menon, L.R.C.P. & S., the then Second Physician, Government Royapuram Hospital, for having kindly gone through this paper.

A CASE OF ACUTE GLOSSITIS.

By G. NARAYANASWAMY MUDALIAR, L.M. & S.,
Triplicane, Madras.

I WAS called in to see a Hindu lady, aged about 50 years, on the night of the 17th of October, with a complaint that the tongue was swollen and protruding outside the mouth. When I examined her, the tongue was seen to be enormously swollen and painful. The patient could not close her mouth as the swollen tongue was pushed out to about half its length. The throat could not be seen and there was a gurgling noise due to difficulty in clearing the throat. The submaxillary glands were also swollen. She had a temperature of 101 degrees, and the pulse rate was 120 per minute. There was severe pyorrhœa alveolaris and the lower central incisors were loose. There was also salivation. A history of pyrexia for nearly 16 days with the temperature coming on every other day was given. She was under native treatment all the while. She developed the swelling of the tongue about 4 days before in a mild form; this subsided a little but again assumed a severe form on the day I saw her.

I gave her an injection of 0.5 c.cms. of adrenalin and prescribed a mixture containing calcium chloride with tincture of belladonna, and also ordered a hot antiseptic gargle. I ordered 3 ounces of mixtura alba to be given the next morning. Hot Antiphlogistine was applied to the swollen submaxillary glands on either side below the jaw.

When I saw her the next morning to my great surprise I found that the swelling of the tongue was reduced considerably, the protrusion having disappeared.

As there was a history of fever coming on every other day I gave her quinine injections, 5 grains, followed by 20 c.cms. of antistreptococcal serum in the evening, and also asked her to continue the same mixture.

She was brought to my office two days after with the information that there was no recurrence of the swelling of the tongue. She appeared to be quite all right except for the dirty teeth. I extracted the loose teeth and gave her instructions regarding oral hygiene.

Recollecting the editorial note in the September issue of the *Indian Medical Gazette* of 1926, that such a condition might be giant urticaria, it struck me that I might try an adrenaline injection followed by calcium by the mouth. The treatment had the desired effect, the tense swelling of the tongue and the prolapse having disappeared the very next morning. There was a possibility of a streptococcal infection from the dirty teeth, as suspected in a similar case reported in the January issue of the *Gazette* of 1927, also being a causative factor.

The absence of sudden onset is against giant urticaria, but anyhow the result of the treatment indicates an allergic condition.

A CASE OF PATENT DUCTUS ARTERIOSUS WITH INFECTIVE ENDOCARDITIS.

By R. VISWANATHAN, B.A., M.B., B.S.,
Assistant Professor of Medicine, General Hospital, Madras.

THE following case is interesting in that the patient had exhibited no symptoms for 16 years in spite of possessing a congenital heart lesion and that he was subsequently afflicted with a superimposed infective endocarditis with atypical subjective symptoms.

R., aged 16 years, was admitted on 24th March, 1930, as an in-patient in the First Physician's wards of the General Hospital, Madras, complaining of œdema of the whole body and passing scanty urine for one month previously. He was perfectly all right before this attack, which began with swelling of the face, the swelling extending to other parts of the body afterwards. He did not complain of fever or of breathlessness.

On admission the patient had a mild degree of general anasarca, a certain amount of cyanosis and a tendency to clubbing of the fingers. There was diffuse pulsation over the precardium, specially marked in the second left intercostal space an inch and a half from the middle line. There was a distinct thrill, occupying almost the whole of the cardiac cycle, in the same space. On auscultation there was a continuous hum in the pulmonary area and to the left of it, heard both during systole and diastole. The systolic portion of the hum was very loud and harsh. Besides there was a diastolic and a small systolic murmur in the aortic area. The pulse was distinctly waterhammer in character, the pulse pressure being more than 80.

*In our opinion, not quite. Parasites are nearly always present in larger numbers in the spleen than in the liver; therefore in cases in which there is a scanty infection they are liable to be overlooked in a smear from the latter.—EDITOR, *I. M. G.*

The following investigations were also made:

Urine.—Alkaline, specific gravity 1015, no sugar, albumen or deposits.

Blood Picture.—Slight polymorphonuclear leucocytosis.

Blood culture.—Sterile. Hæmoglobin 44 per cent., red blood cells 2,070,000 per c.mm., white blood cells 10,310.

Blood urea.—0.34.

Urea concentration:—

1. Before giving urea—quantity 88 c.c., urea 0.95 per cent.
2. One hour after giving urea—50 c.c., 1.26 per cent.
3. Two hours after giving urea—62 c.c., 1.48 per cent.

Blood cholesterol	..	135 mgm.
Blood chloride	..	580 mgm.
Blood phosphate	..	3.6 mgm.
	Systolic.	Diastolic.
Blood pressure	.. 110	30

X-ray heart—General enlargement with marked bulging of the left auricle.

While in the hospital he was running an irregular temperature sometimes going up to 102°F. in the evenings. It was peculiar that the patient had no subjective symptoms excepting for a slight breathlessness on exertion until the evening of 6th April, 1930, when he suddenly became unconscious, worked into convulsions and rolled out of bed. The pulse became rapid and feeble. He remained in that state till the next morning when he died.

A partial post-mortem was done by Dr. Narayana Pai of the Department of Pathology, Medical College, Madras, report of which is given below:—

Report.

Heart weighs about 14 ounces, is enlarged, especially the left side. The endocardium of the right auricle is thickened and opaque and its cavity is slightly enlarged. The tricuspid valve is apparently normal.

The right ventricle is markedly dilated and its wall slightly thickened. The columnæ carneæ are well seen. The segments of the pulmonary valves are thickened and show irregular opaque, yellowish-white, firm, warty excrescences on their ventricular surface. The pulmonary artery is larger than normal, in fact, larger than the aorta in the specimen. Commencing from immediately above the anterior cusp of the pulmonary valve is seen a tract of vegetations similar to those seen on the segments, half an inch broad, running upwards to a distance of about two inches, terminating in a warty mass of the size of a tamarind seed.

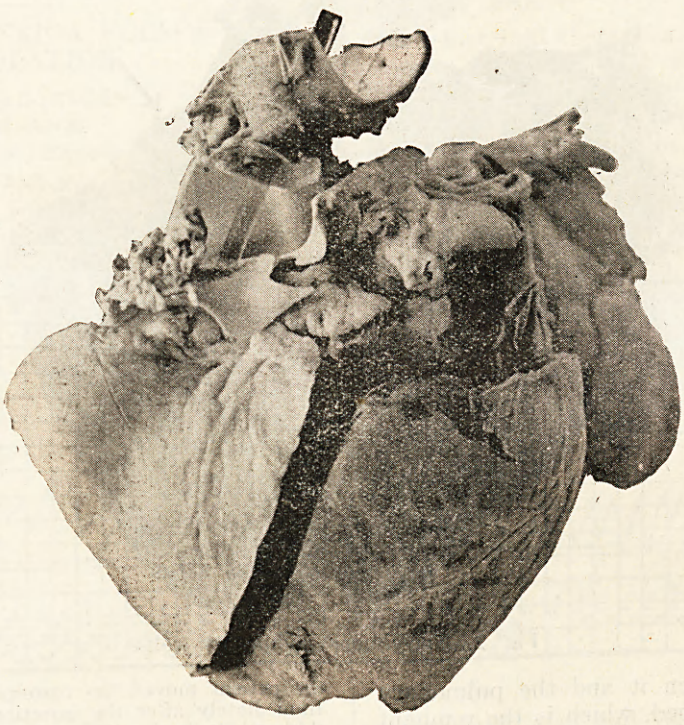

Fig. 1.—Rod through patent ductus arteriosus.

About two inches from its commencement anteriorly, the pulmonary artery is adherent to the aorta at the level of the summit of the arch and communicates with it by a narrow passage (through which a blue glass rod is passed in the accompanying illustration). The pulmonary end of this passage is surrounded by small vegetations. The aortic end of this

passage is found in the floor of a funnel-shaped depression encircled by a ring of atheroma.

The left auricle.—The endocardium is thick and opaque. The mitral valve is normal.

The left ventricle is dilated and its wall is very much hypertrophied with prominent columnæ carneæ and papillary muscles. The cusps of the aortic valve are thickened and their ventricular surface covered with small irregular vegetations similar to those described above. *The aorta* shows well-marked atheroma at its commencement and higher up is seen the

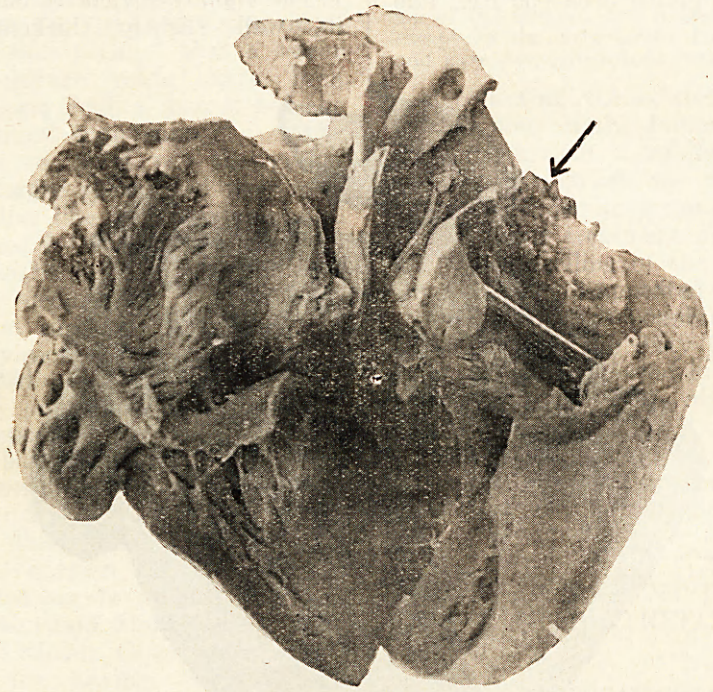

Fig. 2.—Vegetations, pulmonary valve

communication between it and the pulmonary artery, already described, which is the remnant of the ductus arteriosus.

Bacteriological examination of the material from the vegetations on the valves.—"The culture gives a growth of *B. coli*, evidently a contamination."

My thanks are due to Col. Malcomson for kindly allowing me to publish the case.

AN INTERESTING CASE OF ROUND-WORM INFECTION.

By L. KAMAL SINGH, L.M.P.,
State Doctor In-Charge, Tamenlong Dispensary, Manipur State.

I WAS called to see a Kuki female child aged 5 in my compound at 10 p.m. on 9th May, 1930. I found her on the lap of her mother in a state of deep unconsciousness. Her mother was trying to rouse her, frequently calling her by name.

On examination I found the following conditions:—All her limbs were flaccid, no enlargement of liver and spleen; both eyes were half opened, eyeballs rolled upwards and fixed, transparency of the conjunctiva seemed to be lost, pupils dilated and equal in size; mouth partially opened and fixed, no froth, lips pale; pulse quick and feeble. In no way could she be roused. The child seemed to be on the point of death. She had passed about 1 oz. of semi-liquid stool unconsciously.

I saw the same child in the evening, about 4 hours earlier, playing with her companions. There was no history of previous illness. She had had her meal about one hour before. She took a little treacle also before her meal, and her elder and younger sisters also partook of the same.

I administered half a dose of combined "Tabloid" of digitalin and strychnine sulphate gr. 1/100 each, hypodermically. On piercing the skin with the needle the patient moved the corresponding hand and cried. Immediately after the injection the patient vomited; this consisted of undigested boiled rice and vegetable rye which she had taken. Again she passed a small quantity of semi-liquid stool unconsciously. Brandy one drachm by the mouth was administered, and hot water bags to the feet and warm blankets were applied The patient was placed in bed.

About 20 minutes after these measures being taken, the half-opened eyes slowly closed, and the eyeballs, which were rolled up, slowly came down to the normal position; but other conditions remained the same.

At 12 p.m. the injection was repeated and brandy and other measures continued. About half an hour later, slow movements of the limbs were noticed, but there was no response to shouting. The patient was left in charge of the compounder.

Next morning at 5 a.m. I saw the patient at the side of the mother on the bed and called her by name; she responded. I asked the compounder what he had noticed. He said she was roused at intervals, but never responded, though movements of the limbs and groaning at intervals were noted.

At 8 a.m. again I saw the patient; to my surprise she was sitting and playing with an insect. I thought it possible the condition might be due to round-worm infection.

At 8 a.m. castor oil ½ oz. was given and she had good purging at 11 a.m. One dose of santonin and calomel was administered: at that time she could walk and talk,