

Fig. 5.—Amœbic abscess of the brain in the cerebrum on the left side.

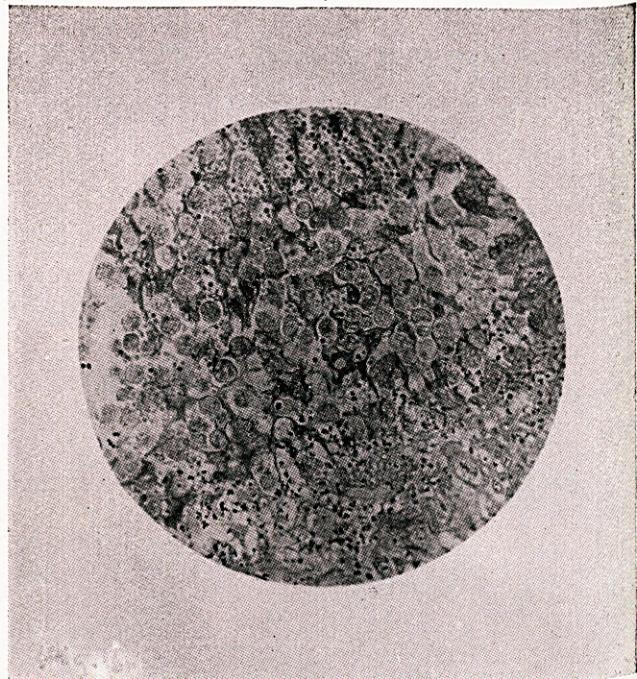


Fig. 6.—Photomicrograph, Cutaneous amœbiasis; large collection of amœbæ in the perianal subcutaneous tissue.

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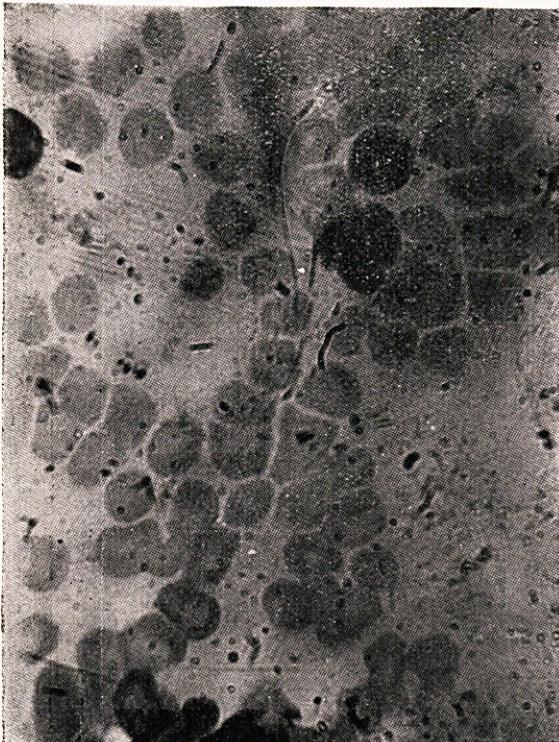


Fig. 1.



Fig. 2

A Mirror of Hospital Practice

A CASE OF KALA-AZAR WITH ENORMOUS LEUCOCYTOSIS

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AN underdeveloped Hindu male child, aged 3 years, was admitted into the hospital with fever, cough, abdominal distension and discomfort of three days' duration. The child had measles three weeks previously.

On admission the child was conscious, restless, slightly dyspnoic, anæmic and cyanosed. The forehead was covered with patches of thin dry greyish crusts; and brownish patches were noticed on the trunk and limbs. There was no enlargement of lymph glands, no discharge from the ears and no evidence of mastoiditis. The neck was soft and freely movable. Kernig's sign was negative. Lungs showed signs of patchy consolidation over the left upper and middle zones, and scattered râles were audible throughout elsewhere. The abdomen was very much distended and tympanitic but no free fluid could be detected. The spleen was not palpable. The liver was soft and enlarged four fingers below the costal margin. The bladder was distended. Heart sounds were normal but rapid.

Laboratory findings.—Blood: Hæmoglobin 7.25 gm. per 100 ml. Total erythrocytes 2,550,000 per c.mm. Total leucocytes 148,000 per c.mm. Neutrophils 15 per cent (myelocytes 3 per cent), lymphocytes 85 per cent (large 4 per cent, small 81 per cent).

In 500 cell counts no eosinophiles, basophiles nor monocytes were found. A fair number of normoblasts were present. Leishman-Donovan bodies both extra- and intra-cellular (within neutrophile poly) were present in the peripheral blood smear (finger prick) (*see photomicrographs, figures 1 and 2, plate XXXV*). The low power one shows the leucocytosis, and the oil-immersion picture shows the L.-D. bodies.

Urine and Stool: Nothing of significance detected. A second examination of blood done a short time after yielded an almost identical result. Blood culture was not done. Sternal and liver puncture smears taken shortly after death showed presence of large number of L.-D. bodies.

Oxygen inhalation improved the cyanosis and very temporarily relieved the respiratory

distress. Enemata, flatus tube and carminatives relieved the distension of the abdomen but for a short while. The child survived for eighteen hours only after admission to the hospital. The abdominal distension, respiratory embarrassment and restlessness were persistently on the increase till death. No permission for autopsy could be obtained.

The presence of rare features in the clinical picture and laboratory findings involve a certain amount of confusion. Relevant investigations, to throw further light and clear the obscurities, could not be foreseen and undertaken because of the shortness of period under observation and the unexpected nature of the laboratory findings. Routine examination of thin peripheral blood smears do not usually reveal the presence of L.-D. bodies.

From the blood picture a double affection can be inferred: (1) Kala-azar, and (2) acute lymphatic leukæmia accounting for such tremendous lymphocytic upheaval. The magnitude of the leucocytes exceeds the usual range seen in inflammatory conditions, moreover the polymorphs are then the usually preponderant cells. The enormity and erratic nature of rise of lymphocytes cannot be ascribed to such inflammatory condition, even allowing for the age of the patient. Absence of enlarged lymph glands, palpable spleen and any hæmorrhagic manifestation go against acute lymphatic leukæmia superimposed upon kala-azar. In lymphatic leukæmia, again, the increase is expected more in the large lymphocytes than in the small ones and lymphoblasts should also be present. Absence of enlargement of spleen and absence of increase in the myeloid group of cells go against splenomedullary leukæmia. The question arises whether the recent attack of measles played a part in the production of lymphocytosis. A leucocytic count of 100,000 per c.mm. with markedly preponderant lymphocytes is not uncommon in pertussis, another common ailment in children.

That kala-azar can cause enlargement of liver without the spleen being enlarged is known. This case appears to be one of rare types of acute fulminating kala-azar causing intense leucocytic reaction and giving rise to a tremendous lymphocytosis, an upheaval which has also produced a disruption of all natural barriers, ties and shelters of parasites causing their widespread dispersal and distribution.

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