If the facts are as I have outlined, and if the Leishman-Donovan body in the human body is thus affected by chemio-physical conditions around it, we may find, in this direction, the reason why the Leishman-Donovan body is not often found in the peripheral blood; the sensibility of the Leishman-Donovan body to chemio-physical conditions around it explains why care must be taken that the syringe shall be free from moisture when making a splenic puncture for the diagnosis of a case of kala-azar, also why the Leishman-Donovan body seems to disappear from the tissues immediately after death in cases of kala-azar; it explains, in fact, the fate of the Leishman-Donovan organism in the human body.

I have brought these observations of the "blue bodies" in leishmaniasis before your notice for comment and opinion, and further, to suggest that when the finding of the typical Leishman-Donovan bodies is not easy, they may encourage further search and act as an adjunct to the clinical history for purposes of diagnosis in cases of kala-azar and in cases of suspected oriental sore.

I am not prepared to say that the "blue bodies" are degenerated Leishman-Donovan bodies, or that they are all fragments of the cytoplasm of the tissue cells destroyed by the Leishman-Donovan bodies. Some are undoubtedly, I think, fragments of cytoplasm of tissue cells, but there are bodies in leishmaniasis films which are round and blue, and which appear to me to be degenerated Leishman-Donovan bodies.

Solitary Abscess of the Liver.

By J. Forest Smith.

Professor Dudgeon has suggested that an account of the solitary abscesses of the liver treated in St. Thomas's Hospital during the last twenty-five years, especially with reference to cases occurring in individuals who have never been abroad, may prove of interest to members of this Section.

Professor Yorke [1], at the annual meeting of the British Medical Association, in 1919, discussed the possibility of amœbic dysentery occurring in this country in epidemic form. He stated that "certain classes at least of the population are heavily infected (that is, show cysts in the faeces), but very few indigenous cases of acute amœbic dysentery have so far been recorded." Wenyon and O'Connor [6], in 1917, stated that though isolated cases of infection have occurred in England, the disease has been rare. Marshall [2] in 1912, recorded one case of amœbic dysentery. Worster-Drought [3] and Rosewarne reported one in 1916, and Laidlaw [4] referred to three others in 1919. In 1921, Young [5] reported one case in a child.

In 1920, a child, aged 5, was admitted to St. Thomas's Hospital with a twenty-four hours' history of abdominal pain, tenesmus, and the passing of blood and mucus per rectum. A mass was thought to be palpable in the abdomen, and the diagnosis of intussusception was made. This was not confirmed at operation. The following day the faeces were examined and Entamoeba histolytica were found in them. Under treatment with emetine-bismuth-iodyde the child recovered. He had never been abroad. The possible source of infection was traced to an uncle, living in the house, who had recently returned from war service in the East, where he had contracted dysentery.

This series is divided into two groups. The first consists of twenty-nine cases, in which a history is given of residence in countries in which amœbic
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Dysentery is endemic. The second group contains three cases. The patients in these cases had never been abroad. The period covered is from 1897 to 1921. (The chief details of Group I are given in tables, shown on the epidiascope.)

GROUP I.

The majority of patients in these cases admitted previous dysentery. Three had had previous treatment for liver abscess, and three more described a previous condition of "inflammation of the liver." Unfortunately, there is no record of emetine treatment before admission. It will be seen that there are no cases in children and only one case in a woman. The age-incidence varies from 21 to 71 years, and the interval between the original attack of dysentery and admission with hepatic abscess from twenty-five years to five weeks.

Dysentery was contracted in India in nine cases, in South Africa in six cases, and in other parts of Africa in two cases. Two cases were infected in Egypt and two others in China. Bermuda, Crete, and Russia supplied one case each. In three cases men had served both in India and in Africa, and in the remaining two cases their history was not obtained. The South African War is held accountable for six cases, and two of these had had hepatic abscess already treated before admission. Of the six cases, five had only been abroad in Africa during that War, the other had served both in India and in Africa, but attributed his dysentery to service in Africa.

Up to the year 1909, there had been fifteen cases with ten deaths, whilst from 1910 to 1921 there were fourteen cases with only one fatal result. This was a case admitted in a collapsed state; he died the following day. Before operation a diagnosis of acute cholecystitis had been made. The surgical treatment of the two periods had not altered, but in twelve of the last fourteen cases emetine or E.B.I. had been given in addition.

Surgical Treatment.—Abdominal incision and drainage were carried out in thirteen cases; transpleural drainage was the method employed in six cases, and resection of rib was done for empyema in two cases. In three cases, both drainage of empyema and abdominal incision were undertaken. One patient died before operation.

Two cases are described as "Resolution by Expectoration." In one of these cases a previous operation had been performed in South Africa for liver abscess. On admission, cough was distressing and the sputum copious. On examination the sputum contained necrotic tissue, in which liver cells were identified. No amœbae were seen. In the other case, that of a sailor, who denied dysentery, but who had had ulcerative colitis treated in England five years before, the patient coughed up pus, described as "like anchovy sauce." The liver was enlarged, and there were signs of consolidation at the right base. With emetine injections the symptoms rapidly improved. In one fatal case, in which at post-mortem examination a track from an abscess in the right lobe to the right bronchus was shown, amœbae had been found in the sputum.

The treatment of one case is described as "Exploration." This was that of a soldier, who was admitted with a history of very severe pain in the right lumbar region, made worse on exertion and followed by frequency of micturition. There was some albuminuria and the right loin was tender. The liver was not palpable. Nephrotomy was performed and the kidney found normal. Sixteen days later he died suddenly from pulmonary embolism, and the cause of the pain was discovered, post mortem, to be due to a solitary abscess of the liver. This illustrates the possibility of mistaken diagnosis where the condition is not
suspected, and it is of interest to learn the provisional diagnoses made before
the cases were sent into hospital. One case was sent as a cirrhosis, whilst
empyema, pleural effusion, and unresolved pneumonia were common errors.
The case of the man admitted as an "acute abdomen" has already been men-
tioned, and two cases came in with a history of repeated negative examination
of the sputum for tubercle bacilli.

The right lobe of the liver was the seat of the abscess in twenty-three, and
probably in twenty-six cases, the left lobe being involved in three cases only.

Post-mortem Examination.—Of the fatal cases, eleven in all, post-mortem
records are available in ten. Ulceration of the colon, either recent or remote,
was present in nine cases. The degree of ulceration varied from gross changes
to a few discrete ulcers in the caecum. In one case it is stated that there was
no evidence of ulceration in the gut. In three cases the abscess had perforated
the diaphragm into the pleura, and in one case into the right bronchus. In
another case the abscess had opened into the ascending colon and into the
duodenum.

GROUP II.

The second group, occurring in people who have always resided in England,
comprises three cases. One of these was a true amœbic abscess, and the
probable source of infection can be given. The other two cases are those of
solitary abscesses occurring in the liver, the aetiology of which I leave for
your consideration.

Case A.—A female, aged 25, admitted in 1920 with a history of ten weeks' pain
under the right costal margin, and loss of weight. On examination a large fluctuating
mass was palpable in the right lobe of the liver. Fever of a hectic type was present.
At operation the abscess was opened and drained. It was solitary and situated in the
right lobe. The pus is described as "chocolate" in colour, and was sterile on culture.
The patient's husband was an ex-soldier who had had dysentery during the war. The
patient had always been resident in England.

The following two cases are submitted for consideration:—

Case B.—A schoolboy, aged 13, who had never been abroad, was admitted to
hospital in 1915. He gave a five days' history of pain in the upper abdomen. The
only past history was that of an attack of pleurisy fourteen months previously. On
examination there was seen to be no fever. A small mass connected with the liver was
palpable. At operation a small quantity of yellow odourless pus was evacuated from a
solitary abscess in the left lobe. The pus on examination consisted of débris. It was
sterile on culture.

Case C.—An hotel porter, aged 26, was admitted in 1899, when he stated that he
had never been abroad and had had no previous illness. He gave a three weeks' history
of chills, cough, and pain in the upper abdomen. On examination there were signs of
a right-sided pleural effusion, and the liver was enlarged 2 in. below the costal margin.
Fever of the hectic type was present. Operation consisted of drainage of an empyema:
death occurred four weeks afterwards. At the post-mortem examination a solitary
abscess with ragged collapsed walls was present in the right lobe. There was no obvious
communication between this abscess and the right pleura, which contained some 30 oz.
of pus. No reference was made to the condition of the colon.

REFERENCES.