in the evening. His appetite and digestion were bad. He complained of palpitation and dyspnœa even at rest and had pain on both sides of the chest. He was very emaciated. He had syphilis and gonorrhœa six years previously.

The man's weight was 6 st. 4 lb. There were crepitant râles on both sides of the upper part of the chest and signs of cavitation on the right. The urine contained a trace of albumin, casts and red blood cells. The *x*-ray showed soft infiltration of the upper and middle zones with a cavity on the right, there were scattered small foci in both bases.

Four inches of the right phrenic nerve was removed and this was followed for a few days by an enormous amount of purulent sputum and a high febrile reaction. After complete rest the temperature became lower but was never normal. Twenty-four c.cm. of 25 per cent glucose solution was given intravenously and 10 units of insulin hypodermically for three days and the albumin and casts disappeared. The first two doses (*see* table) of myocrysin in oil were given without any bad effect on the kidneys. The temperature fell a little, the appetite improved, the sputum became thin and scanty and contained much fewer bacilli. A few crepitations were still present on the right side.

The patient was now considered fit for sanatorium treatment in a cooler climate so he was sent away from Calcutta and is now living in the hills. He is afebrile, can take moderate exercise and has gained 9 lb. in two months. *X*-ray plates are not available.

Case 3.—Artificial pneumothorax combined with gold treatment with apparently more rapid improvement than with artificial pneumothorax alone.

The patient was a Hindu female, aged 28 years. A 4 para. Her mother died of tuberculosis three months ago.

She had had a dry cough for three months and profuse hæmoptysis. *X*-ray examination showed soft infiltration in the left sub-apical and middle zones. Left-sided artificial pneumothorax was performed and after four refills crisalbin in glucose solution was administered intravenously and a total of 2.8 grammes was injected. Eighteen months later *x*-ray showed the lesion in the middle zones as a simple scar and the sub-apical one had disappeared.

The patient is living an active life and has gained 2 stones in weight.

Case 4.—Early lesion of moderate severity; given artificial pneumothorax which was followed by usual complications.

A Hindu male, a student, aged 20 years. Has a slight cough and had a moderate hæmoptysis 15 days previously. Complained of weakness and loss of weight. A skiagram (figure 1) showed soft infiltration in the right upper zone and to a less extent in the middle zone. The left lung was normal. He weighed 6 st. 12 lb. Artificial pneumothorax was induced and was carried on for nearly three months and all symptoms showed abatement. An *x*-ray (figure 2) taken at this time showed beautiful selective collapse but there was a little fluid at the base. Treatment was continued and four weeks later the patient had a continuous high temperature for four days with pain on the right side and cough. There was succussion splash on the right side and dullness up to the fourth rib. Clear serous fluid was found on exploration and some of it was removed, but complete evacuation was not possible as it was in separate pockets. Calcium and diuretics were prescribed and some of the fluid was absorbed. Artificial pneumothorax was abandoned on account of adhesions. Gold therapy was advised but could not then be undertaken. An *x*-ray (figure 3) a month after this attack showed the right chest to be filled with fluid up to the second rib and there was an early infiltration in the left sub-apical area.

Myocrisin injections were begun and are still being given. The patient is now symptom free. A skiagram (figure 4) shows great improvement, the fluid is absorbed and the lesions show definite productive reaction and the weight is now 7 st. 8 lb.

Case 5.—Unilateral lesion with failure of artificial pneumothorax and phrenic evulsion performed later.

A Hindu female, aged 22 years—primipara. Complained of cough for six months with scanty expectoration. Epistaxis (? hæmoptysis) six months ago. Appetite bad, digestion good but says she is subject to vomiting, bowels regular. Had a left pleural effusion about five years ago treated by removal of fluid and gas replacement, and had dysentery about the same time.

The patient weighs 77 lb. Wassermann reaction doubtful. There is amphoric breathing in the left sub-apical region and crepitations in the right middle zone. A skiagram (figure 1) showed soft infiltration in the right apical and sub-apical regions and patchy infiltration in the lower zones and a very small patch in the left sub-apical region. Pleural thickening of both bases and small calcified spots on the left side.

Artificial pneumothorax on the right side was induced but failed so 3½ inches of the right phrenic nerve was removed. Intravenous treatment with crisalbin was begun five weeks later. The patient had an attack of malaria during this treatment which was treated with atebrin. A total of 2.75 grammes of crisalbin in glucose was injected according to the dosage given in the table (*Indian Medical Gazette*, 1939, Vol. LXXIV, p. 327.)

The patient is steadily improving, she is gaining in weight, has no symptoms, her temperature is normal and she can take a moderate amount of exercise. A second *x*-ray plate (figure 2) shows disappearance of the infiltration and formation of scar tissue.

HYDATID DISEASE OF THE LUNGS

A CASE REPORT

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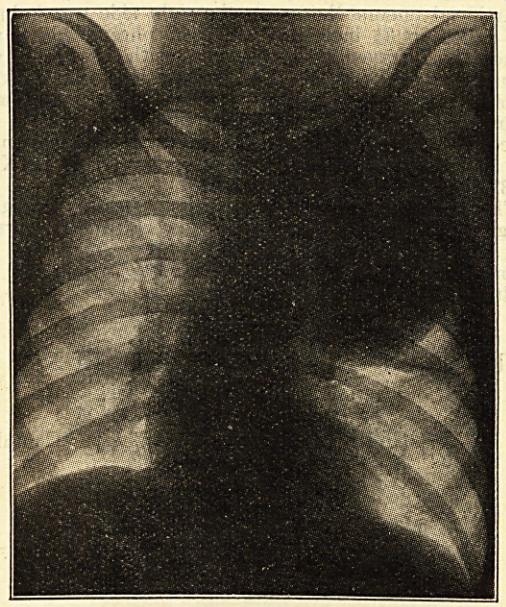
MAPLESTONE (1933) after reviewing the recorded cases of hydatid infection in India suggests that there is a strong probability that the incidence of hydatid disease is commoner in India than the records in the medical literature indicate. Sami (1938) drew attention to the relatively high incidence of hydatid disease in certain rural areas in the Punjab. This author records 27 cases of hydatid infection proven by operation and 13 others in which a clinical diagnosis of hydatid infection was made but operation was refused. These patients were seen in the course of six years and the *Indian Medical Gazette* (Editorial, 1938) commenting on this report stresses that these figures probably only represent a fraction of the actual cases that really exist in the area. A search through the published records in India reveals only two recorded cases of hydatid cysts of the lungs, Tulsi Dass and Prithi Chand (1934) and Ukil (1937). The following patient was brought to one of us for opinion with a history of long-standing lung trouble and with a knowledge of

the existence for years of a hydatid cyst of the lung which had been confirmed by *x*-ray photograph. As the condition is comparatively rare in medical literature in India it was thought advisable to record this case.

Case record

The patient, a middle-class Bengalee Hindu male, 38 years of age, resident of the district of Hooghly, gave a history of general ill health for the past 12 years and that 10 years ago after being under suspicion for some time as a tuberculous patient *x*-ray examination revealed the presence of a dense mass in the left apical region which was thought to be a hydatid cyst. His general health had been fair and he had not suffered at any time from marked pulmonary symptoms. Three months prior to being seen in November 1938 the patient had rigors almost daily and had suffered from pain in the right side of the chest. He was admitted to the Carmichael Hospital for Tropical Diseases for further investigation.



On physical examination there was an area of dullness and absence of breath sounds in the left upper lobe. Liver was enlarged to the umbilicus but showed no irregularities of the surface or the border. The spleen was just palpable. There was moderate degree of hypochromic anæmia and the differential count was within normal limits with 3 per cent eosinophil cells. Sedimentation rate was increased and was 25 mm. in the first hour and 110 mm. in the second hour with a cell volume of 34.3 per cent. Nothing else abnormal was noted. Antero-posterior and lateral skiagrams showed a large circular opacity in the upper zone of the left lung. When seen stereoscopically this opacity appeared to be globular in shape and the size of a small coconut. The lung tissue at the lower and inner margin appeared to be compressed. There was no evidence of a cyst in the liver or the spleen, both of which were enlarged and denser than normal. When compared with the skiagram taken ten years previously the shadow now is denser and about one inch larger in diameter. There is no infiltration of the lung tissue, which appears to be pushed aside. The characteristic clear-cut sharply-defined outline of the cyst is well seen.

The intradermal test of Casoni gave a well-marked reaction. The fluid used for this test had been obtained three days previously from a hydatid cyst removed by operation from the mesentery of a patient. This fluid injected into healthy individuals gave no reaction.

During his stay in the hospital the patient had rigors almost daily with rise of temperature to 102 or 103°F. Repeated examinations of the blood showed no malarial parasites. The rigors were brought under control by a course of atebrin, after which the patient improved in general health.

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LYMPHO-SARCOMA OF ILEUM

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The rarity of this condition prompts the publication of this report.

The patient was an Indian male, aged 24 years, unemployed. Admitted to hospital 7th April, 1939.

History.—Pain in the abdomen for three months, usually all over, but often worse on the right side. Frequent attacks, lasting about 24 hours. Occasional vomiting. Appetite poor. No loss of weight noticed. No cough. No fever. Bowels constipated. No urinary symptoms.

Past history.—No serious illness.

Examination.—Healthy looking man. Tongue clean. Abdomen—Small tumour, size of an egg palpable just below and to the right of the umbilicus. Easily movable but tender to touch. No rigidity of muscles. Liver and spleen not felt. Heart and lungs normal.

Laboratory findings.—Blood—Hæmoglobin 55 per cent. Red blood corpuscles 2,384,000. Total leucocytes 10,200. Polymorphs 72 per cent. Lymphocytes 21 per cent. Large mononuclears 2 per cent. Eosinophiles 2 per cent. Myeloblasts 3 per cent. Malaria parasites not seen. Kahn test negative. Urine normal. Stools normal.

10th April, 1939.—Laparotomy performed. Growth found in the ileum about two feet from the ileo-cæcal junction. Two glands present in mesentery. Excision of growth and glands with one foot of intestine. Intestinal anastomosis. Other abdominal viscera appeared normal.

Convalescence was satisfactory though he suffered from a little post-operative diarrhœa.

1st May, 1939.—Discharged from hospital. Wound healed. No pain. Bowels acting normally. Appetite improving.

Patient was seen on 21st June, 1939, when he had started to gain weight, his bowels were acting normally, and his general condition was very good.

Pathological findings.—Macroscopically the growth was a white homogeneous sessile mass 1½ inches long by 1 inch wide, projecting into the intestine for about half an inch. There was no ulceration. The glands were of a homogeneous consistency and rather white.

Microscopic report.—Lymphosarcoma with metastases in the lymphatic glands.

Comment.—Most cases of sarcoma of the small intestine are reported from the post-mortem room, as they have manifested themselves by their secondary deposits. This case presented itself in the early stage before there was gross glandular involvement, and so was amenable to total eradication.

I am indebted to Dr. Hameed, Provincial Pathologist to the United Provinces, for the pathological report of this case.