A Mirror of Hospital Practice

A CASE OF LIPO-SARCOMA

By N. K. CHAKRAVARTY

A. MUKHERJEE

and

R. N. CHAUDHURI

(*From the School of Tropical Medicine, Calcutta*)

History.—A MOHAMMEDAN male, aged 60 years, was admitted to the hospital attached to the School of Tropical Medicine in November, 1952, with the complaint of progressive enlargement of the abdomen. Illness started 5 years ago as a small globular swelling in the umbilical region and was followed, 2 years later, by another swelling in the epigastric region. With the increase of the swelling he felt heaviness, discomfort and dragging sensation in the abdomen, and lately developed œdema of the legs. His bowels were very constipated.

On examination.—The patient was pale and emaciated with pitting œdema of the legs and feet. There was no jaundice or enlarged lymph nodes. Temperature was normal, pulse rate—90 and respiration rate—20 per min., B.P.—115/75 mm. Hg. There was nothing abnormal in the heart; rales and rhonchi were heard over both lungs, especially towards the bases.

The abdomen was markedly enlarged and protuberant. The swelling was tense and globular, being most prominent in the epigastrium. There was no movement of the abdomen with respiration which was of thoracic type. A number of dilated and tortuous veins were seen on the anterior abdominal wall, the flow of blood being away from the umbilicus. The mass occupied the whole of abdomen and was slightly tender. A rounded margin of the mass could be left only on the left side. It had a smooth surface with some loculations and gave a tense cystic feel. Fluid thrill was absent and the flanks were tympanatic. The swelling itself was dull on percussion but there were bands of tympanatic note over it. Liver and spleen could not be palpated. Rectal examination did not reveal anything abnormal.

Laboratory Examination :

Urine	..	No abnormality.
Stools	..	Hookworm ova, 2,300 per cc.
Blood	..	Hb. 10.1 gm. per cent.
R.B.C.	..	2,240,000 per c.mm.
W.B.C.	..	4,800 per c.mm.
Neutrophil	..	71 per cent.
Lymphocyte.	..	25 per cent.
Monocyte	..	3 per cent.
Eosinophil	..	1 per cent.
E.S.R.	..	80 mm. in 1 hr. (Westergren).
W.R.	..	Negative.
Parasites	..	Negative.
Blood group	..	'B'.

Van-den-Bergh reaction: direct and indirect—Negative.

Thymol turbidity test—3 units.

Total plasma protein—5 per cent, Albumin—2.2 per cent, Globulin—2.8 per cent.

Casoni's test—Negative.

X-ray examination:

Fluoroscopy of chest-Diaphragm raised. Flat film of abdomen-a large dense circular non-homageneous opacity was seen. Posteriorly, it extended to the vertebral border and bulged forwards to the anterior abdominal wall

Barium-meal series.—The pyloric part of the stomach, duodenum and intestines were pushed to the left. The whole of the large intestine was visualized on the left half of the abdomen and a semi-circular presure deformity was seen on the fillel colon. (Plate Fig. 1).

The skiagram suggested the presence of a tumour occupying more of the right side of the abdomen.

On the basis of these findings a cystic tumour in the abdomen was suspected but no definite diagnosis was made. Surgical exploration was not possible owing to the low condition of the patient. The patient died 6 weeks after admission and an autopsy was done.

Post Mortem Report

External appearance—Thin elderly emaciated man with protuberant abdomen. No prominent vein, no jaundice, slight œdema of lower limbs.

On opening the abdomen, a huge yellowish mass was seen to bulge forward occupying the

whole of the abdominal cavity and obscuring the other viscera. It was adherent to the abdominal wall, diaphragm, liver, spleen, kidneys and intestines. The diaphragm, the liver and the spleen were pushed up. The right kidney and suprarenal gland were completely incorporated in the mass and on tracing the ureter they could be dissected out from within the lobules of the mass. The left kidney and suprarenal gland were compressed behind the mass. Both the kidneys and suprarenal glands were, however, quite free from the growth. The large and small intestines were firmly adherent with the tumour and were at places markedly compressed within it but the lumen was patent though narrowed. The mesentery and its lymph nodes were not seen being apparently incorporated within the tumour mass. There were about 2 ounces of straw coloured fluid in the abdominal cavity. On opening the pleural cavity no adhesion or fluid was noticed. Both the lungs were congested and œdematous at the bases. A metastatic nodule was seen in the mid zone of the right lung just under the pleura. Another metastatic nodule was seen in the body of the twelfth thoracic vertebra. All other expected sites of bony metastasis were explored but no such deposit was found. Other organs particularly the prostate, testes, thyroid, stomach and intestines, inspected for the primary growth, were found to be free.

The tumour mass (Plate Fig. 2) had a serous covering and was found to arise from retroperitoneal tissue near the vertebral column. It was an irregular lobulated mass weighing 31 lbs. and measuring 16′ × 12½″ × 10″. The cut surface of the tumour had a yellowish cheesy appearance with a few pale fleshy areas and was soft and pulpy. It was degenerated at places but no hæmorrhagic area was seen.

Histology

Tumour—Section showed the picture of lipo-sarcoma. The nuclei of the lipoblast cells were bizarre looking and hyperchromatic and a few mitotic figures were seen (Plate Figs. 3 and 4). The vacuolated areas in the paraffin preparation could be stained with Sudan III in the frozen sections. The number of malignant cells varied in blocks taken from different parts of the tumour and in some they were almost absent.

Lungs—Section from basal area showed œdema and congestion. The structure of lipo-sarcoma similar to the parent tumour was present in the metastatic nodule (Plate Fig. 5).

Kidney—Glomeruli were hylinised at places with degeneration of the surrounding tubules.

Liver—Slightly congested.

Suprarenal glands, thyroid, testes, spleen, intestines, pancreas and cerebral cortex showed no abnormality in the histological picture.

Body of 12th Thoracic vertebra—showed invasion by the tumour tissue, the histological picture of which was the same as that of the primary growth (Plate Fig. 6).

Discussion

The diagnosis of lipo-sarcoma was established by the presence of lipoblast cells in the histological section. It arose from the retroperitoneal tissue possibly in the perirenal fat of the right kidney, which was buried in the tumour mass. This is a common site for such tumours which usually arise from lower limb, retroperitoneal tissue and inguinal canal though no site is exempted (Willis, 1948). It seems from the long history (5 years) that the tumour first arose as a lipoma which subsequently underwent malignant change. The relative infrequency or even absence of malignant cells in some areas of the growth also points to this. Clinically the cystic feel was apparently due to the mass of fat but the absence of free fluid inspite of a huge malignant growth was rather striking. Lipo-sarcoma of this dimension is unusual but even larger tumours may occur as one of 50 lbs. described by Windle (Ewing, 1942).

REFERENCES

EWING, J. (1942) .. *Neoplastic Diseases.* W. B. Saunders Company.

WILLIS, R. A. (1948) .. *Pathology of Tumours.* Butterworth and Co., Ltd.

A CASE OF HYDATID CYST OF THE BROAD LIGAMENT

By A. F. LASRADO, M.B., F.R.C.S.

LIEUTENANT-COLONEL

Surgeon-in-charge

and

T. V. SWAMY, M.B.B.S.

Sr. Pathologist

Tata Main Hospital, Jamshedpur

THE larval stage of Taenia echinococcus in the form of Hydatid cyst if it occurs is commonly seen in the liver of man. Literature shows it can be noticed rarely in other parts of

PLATE XXII

A CASE OF LIPO-SARCOMA. (PAGE 328.)

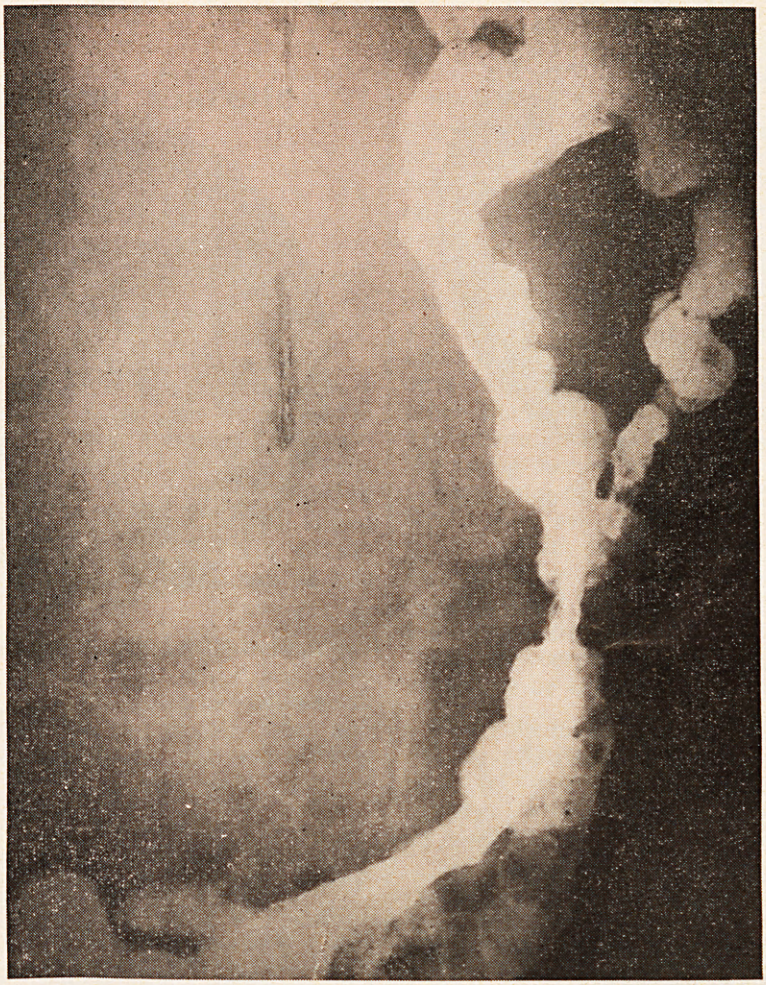

Fig. 1.—Skiagram of abdomen after Barium meal.

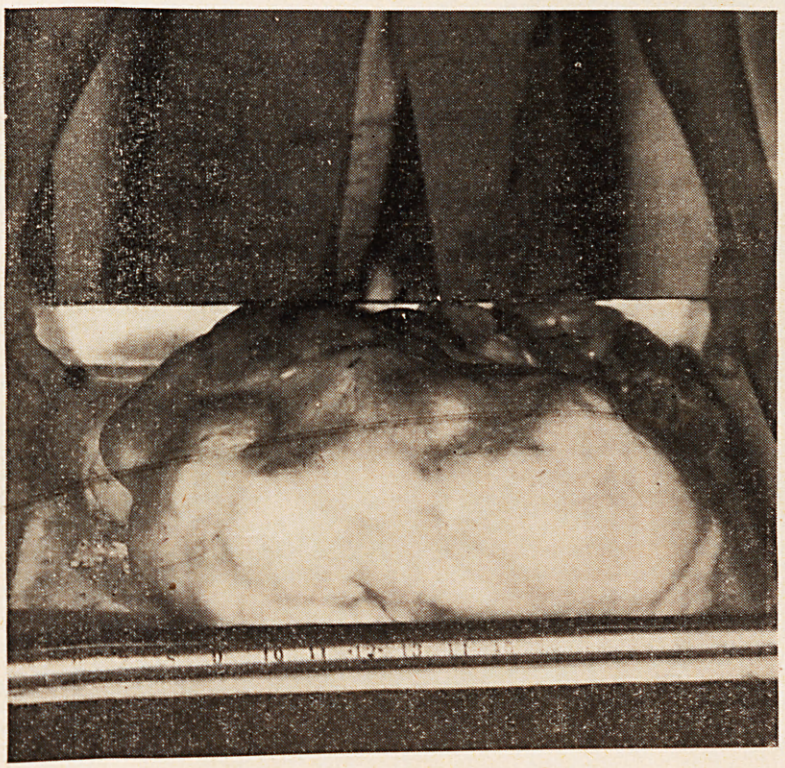

Fig. 2.—The tumour : Macroscopic appearance.

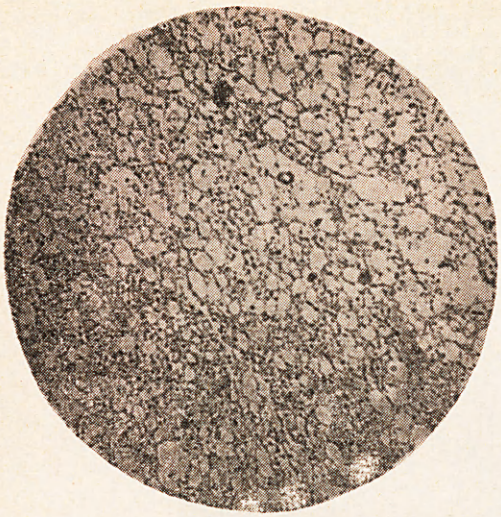

Fig. 3.—Low power view (× 50) of the tumour.

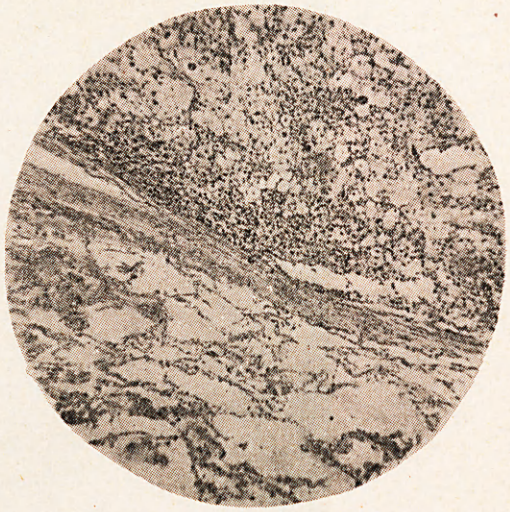

Fig. 5.—Metastatic nodule in the lung (× 50).

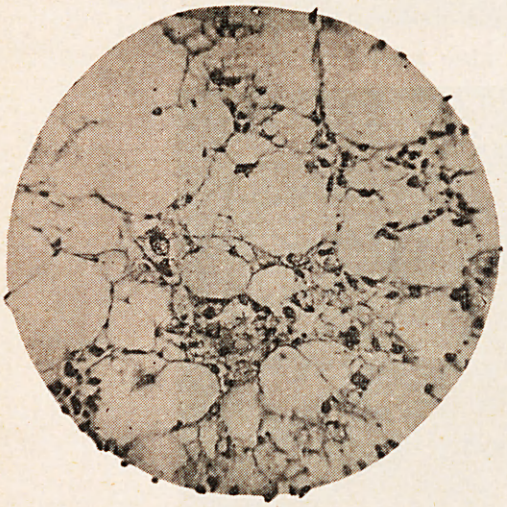

Fig. 4.—High power view (× 300) of the tumour.

Fig. 6.—Metastatic nodule in the body of the 12th thoracic vertebra (× 50).