nodules of tumor tissue which grossly compressed the adjacent normal appearing liver substance.


With hematoxylin and eosin stain (Figure 2), the tumor in most areas consisted of interlacing bands of spindle cells with elongated blunted nuclei, and an occasional perivascular arrangement. However, some of the cells suggested a pleomorphic cell carcinoma. The Masson's trichrome and van Gieson's stains revealed little collagen, and the cells were staining in conformity with muscle cell origin. Many sections were studied after phosphotungstic acid hematoxylin stains, and showed absence of striations in the spindle shaped cells.

Microscopic Diagnosis: Myosarcoma (probable leiomyosarcoma), right upper lobe bronchus.

DISCUSSION

The rarity of intrapulmonary leiomyosarcomas is evidenced by only 10 being reported in the period 1938-1954. The youngest was a four year old boy, the oldest a 67 year old woman. The tumor has been found to be more frequent in males, 9:4. Location of these intrabronchial tumors were as follows: right upper lobe four; right middle lobe two; right main stem bronchus one; left upper lobe two; left lower lobe three; left main stem bronchus one. Three cases were autopsied. In two the tumor was confined to the thoracic cavity while the other had widespread metastases.

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REFERENCES


Malignant Mesothelioma of the Pleura

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This tumor was described by Wagner in 1870. Biggs reported the first case in North American literature. In general there is agreement
that pleural mesotheliomas are primary tumors. However, Willis, Gunn,
Friedmann and others, believe such blastomas are always spread from
bronchial carcinomas or similar tumors situated in non pulmonary areas.
The majority of pathologists now think this tumor is a clinical and
pathological entity.

In 1942, Stout and Murray reported on this subject and their account
is a landmark in the history of this tumor. From that time, diagnostic
errors became less frequent, and at the same time the tumor also became
more rare in medical literature.

Until 1944, Hochberg reported 36 cases taken from the world literature.
Hertzig had a case in 1945, of a man 60 years old, who died within eight
months, of the beginning of symptoms. In 1946, Weissmann reported
two new cases, one of them with necroscopic verification. The same year,
Platt reported a fatal case, in a woman 33 years old, with a two year
evolution of the tumor.

In 1950, Whitehead, reported a fatal case of a man that, presenting
cough, dyspnea and thoracic pain, died 14 days after his admission to
the hospital. At necropsy, he presented a general thickened pleura, rich
in mucous substance and a collapsed but not invaded lung. In that same
year, Campbell reported four new necropsied cases. In 1951, Hochberg
reported 7 cases taken from various New York hospitals, four of them
being localized forms, surgically treated.

Dell'Acqua, in 1951, had a case with the characteristics of a spreading
tumor, ended by death. The same happened to a case of Adorni and Coles
from Buenos Aires, also in 1951.

Benoit and Ackermann presented six new cases of localized mesothe-
liomas, in 1953, three of them with malignant characteristics. Yesner
and Urwitz, in 1953, reported a case of a localized and well circumscribed
mesothelioma, essentially epithelial, that is a characteristic of malignancy.

Lindskog and Liebow reported, another case of a diffuse mesothelioma
of the pleura, in 1953, in a man 40 years old. Submitted to a pleuro-
pneumonectomy, the patient died soon after the operation, by pulmonary

FIGURE 1

FIGURE 2
oedema caused by blood transfusion accident. The surgical specimen showed thickened pleura that was irregular soft and translucent, or solid. The bronchuses has been opened and bronchial carcinoma was not found. Microscopically, the tumor had various forms in the different points examined: papillary like structures, or with the arrangement of adenocarcinoma and irregular groups of neoplastic cells.

In Brazilian literature there is one case of malignant diffuse mesothelioma, in an 8 year old child, reported by Tavares de Lima et al, in 1953.

In 1954, Jenny and Ulsperger, made a revision over 16 mesotheliomas, eleven of which originated on the pleura. All of them had been fatal and verified at necropsy.

Bogardus et al, presented four new cases of pleural mesotheliomas, in 1955, but only one with the characteristics of diffuse malignant tumor.

In this report we are presenting the second Brazilian case of diffuse malignant mesothelioma of the pleura and the first world case of a tumor like that surgically treated with temporary success.

Case Report: A white man, 47 years old, well nourished, had pain in the left hemithorax for five months, cough, and weight loss (4 kilograms). Examination revealed clubbing of fingers, dulness of the left hemithorax and absence of breath sounds on this side. An x-ray film showed diffuse opacity of the left hemithorax, more evident at the base (Fig. 1). The endoscopist saw evidence of passive congestion of the left main bronchus, with partial extrinsic obstruction of the lower lobe branch. No fluid was obtained by pleural puncture.

Laboratory findings were non-contributing.

On January 5, 1954 thoracotomy revealed dense adhesions, with suggestive calcification, between the visceral and parietal layers. Extrapleural digital blunt dissection was performed over the surface of the mass. In the hilum, there were no adhesions or enlarged nodes.

The tumor was removed and macroscopically the lung presented a deformed superficial appearance. The pleura was irregularly and diffusely thickened by a blastomatous layer, firm, white-pinkish with yellow spots, that covered the entire surface of the lung. The tumor-like layer, had various degrees of thickness, more evident on the
diaphragmatic and inferior mediastinal aspects. The cut surface showed the pleura, one to five centimeters thick, over the whole surface of the lung, including the interlobar aspect. The blastomatous tissue contained small cystic cavities filled with sticky, mucoid-like fluid. The subjacent lung was collapsed but not invaded. A careful examination of the bronchi failed to show localized tumor (Fig. 2).

Microscopical specimens taken from various areas of the neoplastic mass, showed different histological pictures: papillary and glandular arrangement, or irregular solid nests of atypical cells, or isolated malignant cells between the described pictures. Sometimes the glandular-like structures were cystically dilated; in other areas the cells were oval and circularly arranged, with a general lymphoangiomatous shape. The cells that formed these structures were mostly cubical, with a small amount of cytoplasm. The nuclei were oval, uniform in size, shape, and were vesicular with one or two nucleoli.

Cylindrical, polygonal, round cells, with or without mycotic figures, were seen in all specimens. In the solid nests the cells were pleomorphic. The Schiff staining of some specimens showed no evidence of mucine. The trostroma in some areas was oedematous and cellular in other places. The lung, adjacent to the involved pleura, was atelectatic but not invaded (Figures 3 and 4). Diagnosis:—Diffuse malignant mesothelioma of the pleura.

He did well until April, 1954, when an abdomino-thoracic tumor was discovered which caused pain and ascitis. This situation became progressively worse, until he died in June, 1954. Autopsy was not performed.

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