A tumor is present within the first part of the sacrum immediately below the pelvic brim. The tumor has destroyed the bone in the region so that as the finger is run downwards over the pelvic brim it enters an irregular cavity which is up to 2.5 cm. in diameter and which is filled with necrotic, diffusent tumor material. The posterior layers of the sacrum appear intact. The tumor appears to be infiltrating upwards into the disc between the sacrum and the 5th lumbar vertebra. Further bones were not examined and the head was not opened in this case as the relatives of the deceased were within ear-shot.

AUTOPSY FINDINGS:

1. Bronchial carcinoma.
3. Emphysema.
4. Possible bronchopneumonia, awaiting microscopic.

CAUSE OF DEATH:

Bronchial carcinoma.

MICROSCOPIC APPEARANCES

MYOCARDIUM:

The myocardium is well preserved and shows no areas of fibrosis or necrosis. Significant inflammatory cell infiltrate is not seen within the myocardium or the overlying pericardial layers. The endocardium is of normal thickness. No tumor is seen in this section.

BRONCHUS:

Sections taken from the bronchus serving the left upper lobe show carcinoma arising from that bronchus and spreading through the wall of the structure in the form of thick layers made up of sheets of closely packed cells. The tumor cells are small and display rounded or elongated, darkly staining nuclei which are enclosed in small amounts of pale eosinophilic or slightly foamy cytoplasm. Only moderate nuclear pleomorphism is evident and mitotic figures, although present, are not numerous. In a few areas the tumor cells are spindle-shaped. Here and there throughout the section are seen small numbers of areas of necrosis some infiltrated by lymphocytes and neutrophils. The tumor is similar to that described in a previous biopsy specimen (S-2079x80).
In the sections taken from the non-tumorous pulmonary lobes well-marked interstitial fibrosis is a feature in many places. In these regions the normal architecture is obliterated and replaced by thick anastomosing fibrous trabeculae which enclose large irregular cystic spaces. The latter are lined by layers of columnar or low columnar cells although in most instances the lining layers are now lost. The fibrous layers are infiltrated at many points by collections of lymphocytes and also display deposits of brownish pigment and numbers of clusters of asbestos bodies. In one section where the honeycomb pattern is pronounced the irregular branching, dilated air spaces are lined by ciliated columnar epithelial cells. This sometime called adenomatous proliferation of bronchioles is fairly widespread in the sections. Asbestos bodies are noted within a few alveoli and a few of the terminal bronchioles. The lung tissues are congested. In a few alveoli clusters of pigment laden macrophages are noted. Acute inflammatory change is not a feature; granulomatous disease is not present. In one of the sections tiny collections of tumor cells are noted but, as stated, these sections are taken away from the main tumor mass, which is well-demonstrated in the bronchial sections. Special stains reveal much of the pigment within the lungs to be iron and, of course, the asbestos bodies react positively with the iron stain. Other preparations show the presence of strands of smooth muscle within the thick fibrous trabeculae in the honeycombed areas.

PANCREAS:

Sections confirm the presence of metastatic tumor within the pancreas and the tumor is similar to that described above. The island of normal pancreatic tissue seen shows autolytic changes but is otherwise well-preserved and shows no areas of necrosis or inflammation.

LIVER:

Likewise metastatic tumor within the liver is confirmed. The surrounding liver tissues are congested and edematous in appearance. The liver cells are well preserved and show no fatty or other degenerative changes.

KIDNEYS:

Section from the left kidney shows the presence of metastatic tumor. The enclosing kidney tissues are congested. Glomerular disease is not in evidence and the cells lining the convoluted and collecting tubules, although autolyzed, show no other degenerative features. There is partial fibrosis of the kidney tissues immediately adjacent to the tumor deposits.

PLEURAE:

A pleural plaque is demonstrated in a section taken from the thoracic wall. The plaque is made up of partially hyalinized, laminated, dense fibrous connective tissue of low cellularity. The fibrofatty tissues adjacent to the plaque and also the skeletal muscle layers show a patchy infiltration by lymphocytes and plasma cells.
OPSY FINDINGS:

1. Small cell, poorly differentiated carcinoma of lung.
3. Chronic interstitial fibrosis of lungs with honeycombing. (Fibrosing alveolitis).
4. Asbestosis.
5. Pleural plaques.

CAUS OF DEATH:

Carcinoma of lung. (Bronchial carcinoma).

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