frequently chain smokers. However, it is our belief that the presence of an adenocarcinoma rather than one of the squamous cell type may be explained by the fact that it is not unusual to find several cellular types in various sections of the same tumor.[58] Therefore morphologic differences in cell arrangements may not really represent different etiologic varieties of cancer.

TABLE IV

SUMMARY OF PUBLISHED CASE REPORTS IN WHICH AUTOPSY DATA ARE CITED

Authors	Year	Sex and Age	Occupation	Duration of Exposure (yr.)	Freedom from Exposure before Death	Nature of Tumor	Primary Site	Metastases
Lynch, Smith[34]	1935	M, 57	Weaver	21	4 mo.	Squamous cell	R.L.L.	Many nodules in R.L.L.
Gloyne[35]	1935	F, 35	Spinner	8	9 yr.	Squamous cell	R.U.L.	Pleura
Gloyne	1935	F, 71	Mattress and opening departments	1½	15 yr.	Squamous cell	R.L.L.	None
Egbert, Geiger[37]	1936	M, 41	Weaver	17	2 yr.	Glandular	L.L.L.	Widespread
Gloyne[36]	1936	M, 59	Packer, stores department	10½	? mo.	Oat cell	L.L.L.	L.U.L. and pleura
Nordmann[38]	1938	F, 35	Carder, spinner, weaver	7	9 yr.	Squamous cell	L.L.L.	Liver, kidneys
Nordmann	1938	M, 55	Prespinning assembly room	7	12 yr.	Squamous cell	L.L.L.	Widespread
Lynch,[39] Smith	1939	M, 50	Weaver	13	3 yr.	Squamous with glandular features	R.L.L.	Pleura, mediastinal nodes
Holleb,[44] Angrist	1941	M, 52	Pipe insulator	25	9 yr.	Non-keratinizing squamous celled	R.U.L.	Mediastinal nodes, adrenal, kidney
Holleb, Angrist	1941	M, 50	Pipe insulator	25	10 yr.	Oat cell	R.L.L.	Widespread, including brain
Linzbach, Wedler[41]	1941	M, 61		> 3	Not known	Squamous cell	R.L.L.	None
Desmeules et al.[42]	1941	M, 57	Machine adjustor	25	1 mo.	Alveolar cell	L. lung	Pleura
Desmeules et al	1941	M, 50	Bagger	22	4 mo.	Squamous cell	R. lung	Pleura
Homburger[40]	1942	M, 45	Not known	5	1 yr.	Squamous cell	R. lung	Diaphragm
Homburger	1942	M, 43	Not known	20	17 mo.	Anaplastic	L.L.L.	Pleura
Homburger	1942	F, 49	No known contact with asbestos		Not known	Squamous cell	R. lung	Liver, adrenal, stomach, hilar lymph nodes
Cureton[49]	1948	F, 37	Pipe coverer	7	15 yr.	Squamous cell	L.L.L.	Pericardium, liver, kidney, ovaries, femur
Owen[51]	1951	M, 39	Asbestos worker	1	20 yr.	Adenocarcinoma	R. lung	None
Stoll, Bass, Angrist[52]	1951	M, 40	Pipe coverer	6	About 4 to 5 yr.	Anaplastic	No definite site	Kidneys, brain, liver
Present authors	1952	M, 41	Asbestos mill worker; sorter	12	2 yr.	Adenocarcinoma	Lingula	Myocardium, pericardium, spine, regional nodes

SUMMARY AND CONCLUSIONS

1. A case of asbestosis with superimposed adenocarcinoma of the lung with metastases, following documented harmful industrial exposure, is presented.

2. ACTH (adrenocorticotrophic hormone) was given with no objective changes in the patient's clinical course.

3. Pulmonary function and cardiac catheterization studies were performed before and after ACTH. They revealed an alveolar diffusion defect and pulmonary hypertension.

4. Asbestos is associated with bronchogenic carcinoma in 13.8 per cent of the cases cited in the literature. In silicosis the incidence is considerably less than this. The asbestos particle may serve as a carcinogen because of the chronic mechanical irritation it produces.

5. Since there are approximately 10,000 workers engaged in potentially hazardous asbestos operations in this country, it is reasonable to assume that there are many unrecognized cases of asbestosis. From the evidence presented a higher incidence of bronchogenic carcinoma should be expected in this group.

Addendum: Since the submission of this manuscript a similar case has been observed by us (MGH #778205). The patient was a forty-six year old contractor's helper whose work since age seventeen consisted of cutting and sawing asbestos board to insulate pipes, boilers and refrigerators. For years he had smoked one package of cigarettes daily. He died after a year of illness during the last four months of which he received 5,000 r of deep x-ray to the left chest.