The demarcation between benign tumors of fat cells (lipomas) and simple or complex, localized or diffuse hyperplasias of these cells is not always sharp, and transitions between various proliferative manifestations of the adipose tissue occur. The histological similarity is especially close in the case of regenerative or inflammatory hyperplasias, in which young fat cells with their foamy cytoplasm are prominently present. Fat cells may represent an integral part of more complex benign tumors, such as fibrolipomas, angiomas, neuromas, and neurofibromas (here usually of the lipoid or xanthomatous type) (Payr; Harbitz; Koettnitz; Agadjaniantz; Harvey; and Stewart). A high lipoid content is characteristic of certain benign and malignant neoplasms of the suprarenal gland (hypernephromas), and may be found often as a more or less generalized feature in numerous other tumors, especially of the malignant type (mammary cancers and renal carcinomas), causing a xanthomatoid transformation of the cellular structures. These observations merit proper consideration in any case involving the possible relationship between occupational activity and the causation of blastomas of the adipose tissue.

While the causes of some of the diffuse localized or diffuse generalized accumulations of fat tissue are known (endocrine disturbances, excessive food intake, and dystrophic replacement of other tissues by fat tissue), the etiology of the circumscribed neoplastic formations of adipose cells is largely obscure. Ewing favors the view that lipomas develop from embryonic anlagen, each possessing its independent system of blood vessels, in the meshes of which the fat tissue forms by infiltration of perivascular cells. He points out that the lobulated structure of lipomas reflects their histogenesis. Other investigators credit congenital disturbances of the nervous system causing trophic changes with an important rôle in the production of these tumors, especially of the multiple variety. No evidence has been advanced so far supporting or even suggesting an occupational genesis of neoplasms of the fat tissue.

B. Experimental Production of Tumors of the Fat Tissue

Recent experiments of Haagensen and Krehbiel have shown that the cells of the adipose tissue may respond with the formation of malignant neoplasms (liposarcomas) when a chemical carcinogen (3.4-benzpyrene), which is considered the chief cancerigenic agent contained in tar, is introduced into the subcutaneous tissue of guinea pigs and mice.

C. Traumatic Lipomas

In contrast to the very scanty evidence available regarding the causal role of specific agents, a nonspecific mechanical trauma to the fat tissue has been incriminated as the main or contributory factor in the production of these neoplasms. It is essential that in an evaluation of the claims advanced a sharp distinction is made between the solitary lipoma and the multiple symmetrical