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Wedler's Paper in 1943 -- a key reference

Wedler was the first to publish reports of pleural mesothelioma with asbestosis, but he refers to other findings of pleural cancer by his British colleague Gloyne (1 case in 1933). Wedler found 2 pleural tumors in autopsies of 29 persons who died with asbestosis. There were also 4 bronchial cancers in this series of 29. In a review of the literature, in particular that of Germany, England, and the United States, Wedler was able to total 92 dissections from case reports, in which 14 lung and pleural cancers were found. This review, at least for the British cases, included unpublished as well as published reports. This 16 percent incidence of lung and pleural cancer was contrasted with a normal expectancy for lung cancers of approximately 2-6 percent.

Further observations on asbestotic cancer were: it occurs as commonly among females as among male patients -- lung cancer is usually 3-4 times as prevalent among men; the cancer victims include relatively young patients, between the ages of 35-41; and the tumors are localized in the lower portions of the lung, where the lungs also have the highest accumulation of asbestos fibers. Wedler reported that the lapsed period from onset of exposure and development of cancer was 12-42 years for all patients. Wedler concluded that the cancers among asbestos workers were clearly connected with occupation. He said that cancer of the lung in asbestosis is a legally justified disease for insurance claims. By this he clearly meant to include pleural cancer as a subgroup of lung cancer.

Wedler also noted that Nornmann and Sorge had conducted experiments on animals, apparently producing cancer of the lungs from asbestos exposure.

I'm not quite sure if this sentence is correct. The German paper says, there is normally (Aratio) 3-4 : 1 men to women in asbestotic cancer this relation is pushed towards the women = relatively more women than men will have asbest-cancer because most of the employees in this job are women!

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ASBESTOSIS AND LUNG CANCER

by
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Asbestos induced lung disease has long been recognized as a clinical phenomenon in those working with asbestos. Extensive research done to-date would preclude substantial new findings. However, further studies are indicated with regard to the pathogenesis and its combination with other lung diseases. On the basis of extensive studies the author was able to show that, for example, associated tubercular lung disease is less frequent than in silicosis. Asbestos has no substantive influence on the frequency and the development of tuberculosis in lungs. An entirely different picture presents itself when dealing with cancer of the lung which appears relatively often in ~~conjunction with poisonous~~ these/this conions* alkaloids. In this particular instance, we are dealing with a new type of occupational ~~disease~~ cancer of common clinical interest, aside from the question of its eligibility for workman's compensation claims.

The following studies published to-date in world literature are mentioned briefly. The first observation of asbestos-induced pleural carcinoma was made by Gloyne in 1933. In 1935 he recorded 2 new related cases followed by another one in 1936. Two years later and, after 50 dissections on patients with asbestos disease, he found 6 of them to have cancer of the lungs. Further, related single observational

* Conions includes those lung diseases which are caused by external material like asbestos, silicones, wheat dust (= "farmer's lung") etc. — there's nothing with alkaloids!!

You should make your translator aware of the necessity to translate exactly „lung cancer" / „pleura tumor" etc — not only „lung disease" or „malignant tumor". I think, it's of very great interest for these totals !!

studies were published between 1935-1941 by Lynch and Smith; Egbert and Geiger; Nordman; Wedler and Wedler; and Linzbach. The most recent discovery of two malignant tumors of the pleura was made by Teutschländer, Alwens and Fischer-Wasels in Germany.

Malignant lung- and pleural tumors in asbestosis have been established on the basis of dissections performed. For example, in Germany out of 29 dissections performed 4 revealed bronchial cancer and 2 malignant tumors of the pleura. On a percentage basis this amounts to approximately 20%. In England, data gathered from dissections involving cases of asbestos -- though less reliable than ours -- show those performed by Gloyne to be 12%. The published American data show 2 bronchial cancers in 13 dissections performed. Italian, French and other literatures contribute no further positive studies to the related field. All together 92 dissections were carried out on patients with asbestos disease which revealed 14 malignant lung- and pleural tumors, corresponding to 16% on a percentage basis.

In order to categorize cancer of the lung as an occupational disease the statistical frequency in this certain disease must be demonstrated, - preferably by reproductibility in experimental studies in animals and especially the behaviour deriving from the basic disease, including the attempt of an pathogenic explanation.

characteristics. Statistical data showing increased frequency of occurrences of lung cancer in patients with asbestosis are given above. Based on broad, statistically obtained data from dissections performed / the average of 16%, as mentioned above, far exceeds the normal expectancy for lung cancers which is approximately 2-6%.

based on large dissection-statistics

Experiments on animals were carried out by Nordmann and Sorge with positive results. Further ~~studies~~ are still pending.

Studies of asbestotic cancer reveal the following peculiarities: statistical data show female patients to be relatively as often afflicted with the disease as are the male patients. The usual ratio of 3-4:1 shifts unfavorably toward the female population since they comprise the greater working force in asbestos factories. Among those afflicted with cancer are relatively young patients, between the ages of 35-41. The tumor is localized in the lower portions of the lung appearing most often where changes in asbestos levels have highest concentration.

The histological characteristics of cancers of the predominantly lamellar-epithelial type carcinoma vary significantly from the ~~cell structure in~~ lung cancers ~~found among a corresponding number of patients with cancer of the lung.~~.

The formation of cancer in an asbestotic lung always implies a long period of exposure to the dust. Here, duration and intensity to exposure ~~correspond~~ to a certain degree. One frequently encounters periods of dust-free intervals between the actual asbestoswork and the onset of lung cancer. The period between first exposure to dust and actual evidence of cancer was for all patients 12-42 years. The connection to occupational cancer ~~is~~ clearly evident.

The understanding for the increased frequency of lung cancer in asbestosis derives from the following aspects: The mechanical and, probably also chemical reactions of asbestos are seen to cause general proliferation of lung tissues and multiplication of the connective tissues. ~~There~~ is epithelial disquamation and cell modification ~~of~~

macrophagia, giant foreign-body cell formation and epithelial metaplasia of the bronchial mucous membrane. The disease which disturbs the function of healthy tissues is never severe enough to destroy the cells. Rather, the development of cancer must be attributed to the metaplasia of the bronchial mucous membrane and the accompanying inflammatory reaction.

As in all occupational cancers, here too, the patient's general [physical] well-being (disposition) must be considered, because only a certain percentage of asbestotic patients succumbs to cancer.

On the basis of the foregone studies it can be concluded, that, cancer of the lung in asbestosis is a legally justified disease for insurance claims.

References and more detailed studies can be found in the author's many publications "On Cancer in Asbestosis", in Archives of Clinical Medicine, (Arch.klin.Med.).

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