copy to 1. Jane Teta
2. Hilton Levinsohn
3. Romeo Vedoue

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND 20205

December 16, 1980

NATIONAL CANCER INSTITUTE

Dr. J. Wister Meigs
Yale University School of Medicine
Laboratory of Epidemiology
and Public Health
30 College Street
New Haven, Connecticut 06510

Dear Dr. Meigs:

At the SEER meeting here on October 17, 1980, there really was not enough time to provide a full explanation of the mesothelioma project that we are trying to develop, and since its feasibility depends on the willingness of the SEER registries to participate in the study, I am writing to tell you more of our objectives, our thinking to date, and the problems with which we would welcome your help. We would appreciate your advice on the technical adequacy and acceptability of this proposed project.

The National Cancer Institute is interested in studying exposure patterns among mesothelioma cases to determine the sources of the increased incidence among shipyard workers and other asbestos-related industrial groups. To date, asbestos exposure has been identified as a causal agent in the development of mesothelioma, but information is incomplete on what other industries and occupations with known or suspected exposure to lower levels of asbestos confer an increased risk. In addition, the role of non-asbestiform materials, such as fibrous glass products, in the origin of mesothelioma, should be evaluated. The mesothelioma project would be part of a larger study of asbestos-related disease that we are developing in an effort to test the willingness and the capacity of the Social Security Administration to provide useful information on industrial exposures responsible for cancer. The larger study would also include data from the Veterans' Administration.

We are considering a case-control study of mesothelioma. The project would involve an interview of next-of-kin for historical exposure information including smoking, industry, occupation and residence. To assure a sufficiently large series, it may be necessary to define cases as far back as 1970. For at least a sample of the cases, pathology slides would be reviewed.

We would like to obtain enough information from the SEER registries to form the basis for an RFP to which most registries would be interested in responding. We want also to know what kind of cooperative framework might be planned for the study and publication of its results. The following questions arise:

1. If your registry were participating in the study, would you want to obtain occupational history and related information on your own cases, or to have an outside contractor obtain this information?

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PLAINTIFF'S EXHIBIT

UC-4885

Union Carbide trial exhibit UC-4885: Robert Spirtas (NCI) to Dr. J. Wister Meigs (Yale) on a Proposed SEER Mesot... Published by AsbestosClaims.Law
ACL Doc 19396 · Page 1 of 8 asbestosclaims.law/library/19396/1

2. If your registry were to participate in the study, would your group be willing to have initially a representative sample, but ultimately perhaps, all of your cases, reviewed by an expert pathology panel?

3. How might a pathology review panel be chosen, and how might it operate, so that the process would be acceptable to your sources of material?

4. If your registry were to participate in the study, would you be interested in an active role in conducting the pathology review, administering the questionnaire, interpreting the data analyses, or in writing up the material for publication?

5. Do you believe that your registry would be willing to participate in the mesothelioma study I have outlined?

Sincerely,

Robert Spirtas

Robert Spirtas, Dr. P.H.
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Environmental Epidemiology Branch
Landow Building, Room 4C16
Bethesda, MD 20205
Phone: (301) 496-9093

RS:hey

cc: Dr. Fraumeni
Dr. Beebe
Mr. Connelly
Dr. Myers
Dr. Pollack
Dr. Young

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[redacted]

MALIGNANT MESOTHELIOMA IN CONNECTICUT 1935 - 1977

(ANATOMIC PATHOLOGY SECTION)

INTRODUCTION

In any retrospective review of mesothelioma it is essential to include an objective review of all anatomic pathology material. This review should include all available reports and slides including cytology, surgical pathology and autopsy materials. It should be conducted by an experienced pathologist with special expertise in the surgical pathology of tumors. thoroughly familiar with the gross and microscopic characteristics of mesothelioma and

The object of this review should be to classify the cases relative to the certainty of diagnosis using well defined criteria for the diagnosis of mesothelioma. In the present study this morphologic review is first being conducted with no knowledge of the occupational history or environmental exposure to asbestos. As the study progresses this data will be analyzed in relation to these factors.

(Slide 1 Classification)

On first review the cases in this study are being placed in one of six categories (see slide) which represent the relative certainty of the diagnosis of mesothelioma using anatomic criteria. This is being carried out on all available materials, including cytologic preparations, surgical pathology and autopsy reports and slides. As might be expected in a study of this type, the material available is quite variable. In all cases the diagnostic classification is based on autopsy materials, or ~~in some cases~~ surgical pathology

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material, in no case was cytology alone used to place a patient in category 1,2 or 3. As the study progresses, attempts will be made to obtain the original blocks for additional special stains - PAS with and without Diastase, Alcian Blue with and without Mucicarmine, Reticulin and Masson stain as indicated. ...d that in a number of the cases already reviewed ... stains were available.

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It should be pointed out that as further studies of this material are carried out, cases may be moving from one to another classification and this report should be considered only a preliminary report at this time. It also should be mentioned that less than half of the total number of cases in this study have been subjected to anatomic pathology review as of this time.

Discussion: The most striking histologic character of diffuse mesothelioma is the remarkable structural variation that occurs from area to area even in the same case. As this portion of the study progresses, these mesotheliomas will be categorized as to pleural, peritoneal or other, and an attempt will be made to categorize the histologic structure based on its predominant pattern, into (1) epithelial (tubulo-papillary and undifferentiated polygonal), (2) sarcomatous or mesenchymal and (3) mixed.

As has been emphasized by others two problems become apparent on review of this material. The first is the separation of localized or nodular (and sometimes benign mesothelial reactions) from diffuse or malignant mesothelioma. In the present study this is a minor problem because of the selection of the material being reviewed, having been obtained from the Tumor Registry where the vast majority of these cases would have been reasonably carefully reviewed in their own institution and they would have had benefit of the ~~course~~ outcome or progression of the disease. As is the practice in Connecticut, cases are occasionally reclassified or removed from the Tumor Registry by the local hospital when it is determined that they do not represent the malignancy originally reported.

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The second and more important problem in the present study is the separation of mesothelioma from metastatic carcinoma. The findings at autopsy in the cases so evaluated are extremely valuable in this regard and the use of special stains such as Alcian Blue with and without hyaluronidase, PAS with and without Diastase and to a lesser extent Mucicarmine and connective tissue stains are valuable in this regard. It can be pointed out that as one gains experience in looking at large numbers of mesotheliomas, one begins to recognize a characteristic pattern which has been well described by many workers in this field. This coupled with experience in surgical pathology of tumors enables one to categorize many of these cases in the proper class. As pointed out earlier, however, on further review, this was not possible in some of the cases, however. It is possible that with additional studies and special stains this classification should become more accurate.

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There is another problem that has arisen and hopefully will be addressed in the later anatomic pathology studies. There is variation in the literature on the classification of these tumors. The lines between localized and diffuse are not always clear cut and the separation of benign from malignant is not always as readily apparent as one would be lead to believe by review of the literature. In fact, there are discrepancies between some of the classic papers in this field regarding characteristics of these neoplasms, both gross and microscopic. This is not limited to growth patterns such as that in the pleura or peritoneum, but includes such important characteristics such as metastatic patterns and certainly applies to histologic descriptions which are not ~~uniform~~ uniform from paper to paper. It is hoped that as an outgrowth of this study some clarification of this aspect of the problem will be forthcoming.

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