

**Comment.**—Several factors favored the formation of thrombus and subsequent embolism in this patient. Although she was well-developed, she was also obese. There had been two episodes of recent surgery, one of them pelvic and associated with pregnancy, and the other also intra-abdominal and associated with an active inflammatory process. Failure to observe changes in the left thigh during life was not extraordinary. Most phlebothromboses cannot be detected clinically even when there is evidence of pulmonary embolism, unless there is associated phlebitis. Even careful dissection at autopsy will reveal the site of origin of only a small proportion of these lesions, presumably because the thrombus had been entirely dislodged. The current increase in abortions necessitates specific inquiry and careful examination in young women and probably should indicate delay of all except emergency surgery for a period of at least six months.

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## Advertising by the AMA

**To the Editor.**—I find it laudable that the American Medical Association is sponsoring a series of advertisements in popular publications such as *Newsweek*, *Time*, and the *New York Times* to point out one's personal responsibility for his own health and the AMA's interest in maintaining the nation's health. However, I think it somewhat presumptuous of the AMA, which contains less than two thirds of the nation's physicians, to claim to speak for all "America's Doctors of Medicine."

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## A Comparison of Two Classifications of Coal Worker's Pneumoconiosis

**To the Editor.**—The Federal Coal Mine Health and Safety Act of 1969 offers all working coal miners, at no expense to themselves, the opportunity to have chest roentgenograms taken at intervals. Moreover, instructions were published in the Federal Register<sup>1</sup> stating that the roentgenograms should be categorized according to either the International Union Against Cancer (UICC)<sup>2</sup> or International Labour Organization (ILO) classifications.<sup>3</sup> Most persons are not

No. of Films in Sample	Category According to ILO Classification	Category According to UICC Classification
(Reader G. J.)		
72	Z	<div><div>40% or 55.6%</div><div>23% or 31.9%</div><div>2% or 2.8%</div><div>7% or 9.7%</div></div> <div>Cat. 0</div> <div>Cat. 1</div> <div>Cat. 2 and 3</div> <div>Unreadable</div>
50	O	<div><div>42% or 84%</div><div>3% or 6%</div><div>5% or 10%</div></div> <div>Cat. 0</div> <div>Cat. 1</div> <div>Unreadable</div>
(Reader E. P.)		
60	Z	<div><div>15% or 25%</div><div>42% or 70%</div><div>3% or 5%</div></div> <div>Cat. 0</div> <div>Cat. 1</div> <div>Cat. 2 and 3</div>
44	O	<div><div>33% or 75%</div><div>11% or 25%</div></div> <div>Cat. 0</div> <div>Cat. 1</div>

aware that there are two 1968 ILO classifications of pneumoconiosis; namely, an extended and a shortened version.<sup>3</sup> It is frequently assumed that the two 1968 ILO classifications are similar. This is an erroneous assumption. Firstly, the shortened 1968 ILO classification, like the 1959 version,<sup>4</sup> includes a suspect category (Z), while the UICC and the extended ILO classifications do not. Secondly, provision is made to interpret irregular opacities in the UICC but not in the shortened version of the ILO classification. Thirdly, the UICC classification, unlike the shortened version of the 1968 ILO classification subdivides each major category into three subcategories—0/−, 0/0, 0/1, etc.

All early studies of the prevalence of coal workers' pneumoconiosis (CWP) in the United States relied on the 1959 ILO classification.<sup>5-6</sup> In contrast, most roentgenograms that are now being taken are being interpreted according to the UICC classification. Despite the differences in the classifications mentioned above, there has been a regrettable tendency to compare the present prevalence of CWP with that which was present 10 to 20 years ago.

In 1963 to 1966 the US Public Health Service conducted a prevalence study of CWP in US coal miners.<sup>5-6</sup> The films taken in this study were interpreted by a panel of distinguished radiologists. The films are still available and two of the panel kindly agreed to re-read certain of the roentgenograms according to the UICC classification. Since the main differences between the classification mainly involved the films previously read as category Z, we selected two samples of roentgenograms (one for each reader) that contained a substantial percentage of films that had been previously read by one or other of them as Z (suspect). Each reader did not read the same films since they had not always agreed in their inter-

pretation at their first reading. An appreciable number of films were, however, common to both subsamples: thus, G.J. re-read 122 roentgenograms of which he had previously interpreted 72 as category Z, the remainder having been designated as category 0 by him, and E.P. re-read 104 roentgenograms, 60 of which he had previously classified as category Z and the remainder as category 0. The results are shown in the Table.

There is little doubt that some of the differences that are being found in the prevalence of CWP in the 1963 to 1966 study<sup>5-6</sup> and the present Interagency Study<sup>7</sup> are a result of changing the classification by which films are categorized. The possibility exists that the difference may be a consequence of intra-observer variation; however, previous studies have shown this to be negligible. It is thus apparent that the substitution of the UICC classification for the ILO classification leads to a greater number of roentgenograms being interpreted as showing pneumoconiosis.

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