

hypernephroma, indicative of the unusual behavior of this neoplasm under certain yet unexplained conditions.

Beer recognized that late metastases in hypernephroid tumors are not infrequent and believes that some forces in the patient's body hold them in check for many years until finally they become clinically evident (*Surg Gynecol Obstet* 65:433, 1937). He found that distant metastases sometimes occur seven to ten years following the nephrectomy. Johnson and Lindskog, reporting on 100 cases of tumor metastatic to the lung and mediastinum, found the interval between the treatment for control of the primary lesion and the detection of the metastatic lesion varied between concurrent diagnosis and 18 years (*JAMA* 202:94, 1967). Some of the longest intervals occurred with adenocarcinomas of the kidney and breast with latent periods of 16 years with each. Although this relatively long latent period has caused speculation that an immune mechanism or humoral factor may inhibit tumor growth for prolonged periods, they thought this phenomenon could be more simply explained on the basis of the slow rate of tumor growth. They cited that doubling times of some tumors varied from 25 to 600 days so some tumors might require 20 to 30 years before becoming radiographically detectable.

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### Acupuncture and Suggestion

*To the Editor.*—Adler (222:833, 1972) urges a scientific evaluation of the role of suggestion in the efficacy of acupuncture. He, like others, urges a double-blind study, using as controls acupuncture needles deliberately placed a short distance from "approved sites." Unfortunately, the technique advocated will not work, for the following reason.

It is not generally realized that proper placement of acupuncture needles requires the cooperation of the patient. Surface anatomy and depth of insertion are both critical. At a large number of points, paresthesias are elicited; with most other clinically useful points, a sensation of soreness or mild discomfort prompts the patient to exclaim "That's it!" or "Yes, yes!" as the correct location is reached. Only the naive subject could be deceived by the double-blind approach, and then only briefly.

An alternative might be to compare results with acupuncture and with hypnosis in the same individual. A high degree of correlation would be suggestive but not conclusive evidence of a common mechanism, already asserted by Kroger (220:1012, 1972) and others.

Definitive studies of the scope and limitations of acupuncture in western medicine are needed. Despite the inapplicability of the simplistic double-blind approach, meticulous scrutiny by careful clinicians and trained investigators should provide the basis for a reasoned appraisal.

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### Black Lung Benefits

*To the Editor.*—On Sept 30, 1972, a new set of regulations for black lung benefits was published in the *Federal Register*. The regulations included some interim standards designed to facilitate the more rapid processing of black lung compensation claims. Since that time, the Appalachian Laboratory for Occupational Respiratory Diseases has repeatedly been asked by physicians in the field of industrial medicine and chest diseases what percentage of working miners are eligible to receive black lung benefits under the interim standards. At the present time and until 1973, a miner may qualify for black lung benefits if (1) his chest roentgenogram shows evidence of pneumoconiosis—either simple or complicated; (2) he has worked for 15 years in a coal mine and has sufficient ventilatory impairment to meet the criteria shown in the table published on page 20646 of the *Federal Register*; and (3) he has certain other respiratory impairments, such as a reduced diffusing capacity, and arterial desaturation.

In 1969, the Public Health Service commenced a large epidemiological study of the respiratory status of working coal miners in the United States. Nine thousand seventy-six miners from 31 mines in ten states were examined. It is believed that these are a fairly representative sample of the US miners as a whole. Of this sample, 29.9% could qualify for black lung benefits on the basis of roentgenographic evidence of coal workers' pneumoconiosis, while 8.8% could qualify on the basis of a reduced ventilatory capacity. We do not have the necessary physiological measurements to allow us to say how many would meet the criteria mentioned in the third condition. Since there is some overlap, ie, some coal miners

could qualify by means of the criteria mentioned in either conditions 1 or 2, the total number presently eligible is 34.9%. However, if only miners over the age of 50 are considered, the percentage eligible rises to 55.3%, of which 35.3% qualify on the basis of an abnormal roentgenogram, 10.2% qualify on the basis of a reduced ventilatory capacity in the presence of a roentgenogram showing no evidence of pneumoconiosis, and 9.8% qualify on both counts. Were the same standards for ventilatory capacity applied to a similar nonmining population over the age of 50, 25.3% would be eligible on this basis. Thus, a total of 20.0% of working miners over the age of 50 have sufficient ventilatory impairment to meet the interim standards, while the comparable figure for a roughly similar nonmining population is 25.3%.

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### Edrophonium Used for Vagotonic Action

*To the Editor.*—In a small, personal series of postoperative patients, certain observations have been made that suggest an additional therapeutic use for edrophonium chloride (Tensilon). Edrophonium belongs to a family of anticholinesterase agents, producing effects equivalent to continuous stimulation of cholinergic nerves, ie, continuous vagotonia.

It is noted for rapid onset and brief duration of action. The principal use has been as a provocative drug for the diagnosis of myasthenia gravis or for supraventricular tachyarrhythmias.<sup>1</sup>

While observing the intravenous administration of 10 mg of edrophonium chloride for a tachyarrhythmia in a patient postoperatively with protracted severe adynamic ileus, I was struck by the prompt onset of borborygmi and strong peristaltic sounds. Flatus and stool were produced. The bowel had been nearly silent for several days prior to the injection.

The drug has since been used in 12 cases of postoperative ileus in doses ranging from 2.5 mg to 10 mg both by intravenous and intramuscular routes. Active peristalsis was produced in every case. Repeated doses of 2.5 mg were given in several cases. I have used neostigmine methylsulfate in recommended dosages in many cases for the past 15 years and