Primary Lung Cancer and the Chilaiditi Syndrome

To the Editor:

After noticing some patients with coexisting primary cancer of the lung and the Chilaiditi syndrome (interposition of the colon and, eventually, of the small intestine between the liver and the diaphragm, with the characteristic image of hyperclarity between both organs), we considered making a statistical study—we wanted to know and to compare the incidence of the Chilaiditi syndrome: (a) in the general population; (b) among people affected with thoracic symptomatology; and (c) in those with primary lung cancer.* Certain observations and general conclusions we now wish to share with your readers.

The incidence of the Chilaiditi syndrome in the Orense province population has been studied with a spot check of 100,000 roentgenograms. These were taken from a random sampling (indiscriminately selected) of healthy or supposed-to-be-healthy population. The roentgenograms were secured from a chest x-ray campaign for uncovering thoracic infections in the people of the province. In 23 of these (0.23 per thousand), the Chilaiditi syndrome was traced. In all cases, the chest x-ray film findings were normal (negative).

The incidence among persons affected with thoracic or respiratory symptoms, was arrived at through a check of 19,000 clinical histories and their recorded roentgenograms. Among the 19,000 histories, we found 13 cases with Chilaiditi syndrome (0.7 per thousand). Of the 13, 3 had normal chest roentgenograms and clinical findings; 3 suffered from chronic bronchopathies; 2 from pulmonary tuberculosis; and 5 were diagnosed as having primary lung cancer.

In this same group of 19,000 clinic cases, the number of patients with primary lung cancer (to be selected for further study) was 326. Out of this number, the Chilaiditi syndrome was observed in five cases (15 per thousand), a much higher incidence than was found in the population in general (0.23 per thousand according to our sampling) or among carriers of chest diseases (0.7 per thousand).

The cases showing both primitive lung cancer and the Chilaiditi syndrome numbered, as we said, five. All were men. The location of cancer was on the right side in 4 cases (example given in Fig 1); on the left, in one patient. In the former, the hilus compromise was evident. In all five cases, diaphragmatic mobility on fluoroscopy was good. The coexistence of lung cancer and Chilaiditi syndrome was noticed in the first x-ray examination in 4 of the 5 cases; in the other case (Fig 1), the Chilaiditi syndrome was not discerned on first examination, but appeared later.

To sum up: in our survey of roentgenograms from the general populace and from pulmonary disease carriers, a pronounced increase in incidence of Chilaiditi syndrome was observed among carriers of primary lung cancer.

*This study was the subject of an article by the same author, published in Revista Clinica Espanola (Spanish Clinical Review), vol 128, no 4, February 28, 1973.