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■ LETTER TO EDITOR ■

The First Case of Intraperitoneal Bronchogenic Cyst in Korea

To the editor:

We read with interest the article by Kim et al., "The first case of intraperitoneal bronchogenic cyst in Korea mimicking a gallbladder tumor" on the June 2004 issue of *J Korean Med Sci* (1). In their report, they emphasized the case was the first case of intraperitoneal bronchogenic cyst in Korea. However, we found two other previously reported cases of intraperitoneal bronchogenic or foregut cyst through search of the Korean literature (2, 3) and a case of subphrenic bronchogenic cyst near the liver through a search of the English literature (4). Thus, it seems to be controversial whether the case of Kim et al. should be the first example of intraperitoneal bronchogenic cyst in Korea. Furthermore, they described, "Among the cysts of foregut origin, those containing cartilage or seromucinous respiratory glands are designated as bronchogenic cysts; those containing two well-developed layers of smooth muscle without cartilage are designated as esophageal cysts; and those with none of these distinguishing features are classified as foregut cysts (5)" in their discussion. However, there was no mention whether their case contained cartilage or seromucinous respiratory glands. They only described "Microscopically, the cyst is lined by a layer of pseudostratified ciliated columnar epithelial cells occasionally interspersed with goblet cells. Thus, the cyst was histologically diagnosed as a bronchogenic cyst". Considering these two sentences, the more appropriate diagnosis would have been a foregut cyst. Indeed, clear diagnostic criteria are required especially for the diagnosis of bronchogenic cysts in unusual locations (6), and the most reliable criterion is the presence of cartilage in the wall (7). Practically, however, it is often difficult to find. Therefore, the criteria referenced by Kim et al. (5) seem to be rational. Although Park et al. reported their case as a bronchogenic cyst, they also suggested that the diagnosis of their case was controversial because there was no cartilage or seromucinous glands (2). The case of Kim et al. (4) contained identifiable hyaline cartilage and therefore is supposed to be the subdiaphragmatic bronchogenic cyst according to well established histologic criteria.

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Reply:

We thank Drs. Song and Suh for their comments and the editor of *J Korean Med Sci* for giving us an opportunity to reply. Dr. Song and Suh pointed out that there are other cases of intraperitoneal bronchogenic cyst or foregut cyst in the Korean literature and a case of subphrenic bronchogenic cyst near the liver in the English literature (1-3). In our article we stated that only 8 cases had been reported by the year of 2001 in the English literature. Regrettably, we could not find any Korean literature reporting intraperitoneal bronchogenic cyst, which might have been due to an incomplete search of the literature. If we were able to find any Korean case at that time, we would not have described our case as "the first case of intraperitoneal bronchogenic cyst" in the first place. As for the case in the English literature (3), we could not reference the article since our manuscript was submitted in March 2003.

Regarding the second comment on the foregut cyst by Drs. Song and Suh, the bronchopulmonary foregut malformations are anomalies in the pulmonary development due to abnormal budding of the embryonic foregut and tracheobronchial tree. These anormalies include foregut cysts, bronchogenic cysts, enteric cysts, and neuroenteric cysts. Bronchogenic cysts

are congenital lesions, thought to be originated from the primitive ventral foregut and may also be originated from the mediastinum, intrapulmonary area, or less frequently in the subphrenic and intraperitoneal space. The cysts contain mucoid materials and are lined by a ciliated columnar or a cuboidal epithelium. Their walls contain smooth muscles and often cartilage (4-7). We agree with Drs. Song and Suh that the cyst of foregut origin, without seromucinous respiratory glands or cartilage, should be classified as a foregut cyst. However, some have found that even the lining epithelium of a ciliated foregut cyst is identical to the bronchiolar epithelium when the tumor is evaluated by histologic, histochemical and immunohistochemical studies. They suggest that the ciliated foregut cyst is one of the developmental abnormalities that could arise from a bronchiolar bud of the tracheobronchiolar diverticulum (8). Although we agree with Dr. Song and Suh that our case can be depicted as a ciliated foregut cyst, we would like to point out that our case had no connection to the contiguous structure and the lining epithelium did not originate from a metaplastic change but rather was innate in nature, containing a smooth muscle layer. Therefore, it would be reasonable to depict the cyst as a bronchogenic cyst. We hope we can collect more relevant cases to thoroughly investigate the nature and characteristics of the disease.

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