우연히 발견된 다발성 폐결절: 양성 전이성 근종과 ¹⁸F-FDG PET/CT

고신대학교 의과대학 핵의학교실 이석모

Incidental Multiple Pulmonary Nodules: Benign Metastasizing Leiomyoma and ¹⁸F-FDG PET/CT

Seok-Mo Lee, M.D.

Department of Nuclear Medicine, Kosin University Medical School, Busan, Korea

Benign metastasizing leiomyoma(BML) is a rare condition affecting women with a history of having undergone hysterectomy or myomectomy for a benign uterine fibroid, that is found to have metastasized to extrauterine sites, usually many years after hysterectomy.1,2) Patient with BML almost always asymptomatic, although if the lesions are large enough, they can cause compressive symptoms. Among several hypothesis of pathogenesis, most plausible theory is that these tumors represent a true metastatic lesion but are very low-grade sarcoma.3) Because the tumor is responsive to estrogen, menopause and pregnancy have slowed the growth of these lesion4) and it seems reasonable to perform hysterectomy in patients with a uterine mass and, at the same time, perform oophorectomy for hormonal control. BML is an unusual cause of diffuse pulmonary nodules which should be considered in females with unexplained nodules and a history of surgery for uterine leiomyoma. (Nucl Med Mol Imaging 2007;41(3):258-259)

Key Words: multiple pulmonary nodules, benign metastasizing leiomyoma, 18F-FDG PET/CT

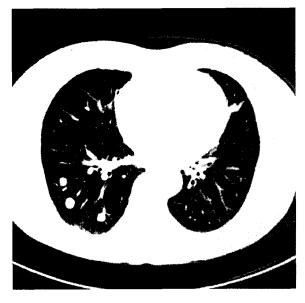


Fig 1. 51-year old female presented with multiple pulmonary nodules which were incidentally revealed on chest X-ray of medical examination for health (not shown). She did not have any respiratory symptom and past history of malignancy. Tumor marker for malignant lesion was unremarkable. 8 years ago, she had a total abdominal hysterectomy for uterine leiomyoma. Chest CT revealed multiple pulmonary nodules with variable size and round shape.

- Received: 2007. 4. 11. Accepted: 2007.4. 16.
- Address for reprints: Seok-Mo Lee, M.D., Department of Nuclear Medicine, Kosin University Hospital, 34, Amnamdong, Seo-gu, Busan 602-702, Korea
 Tel: 82-51-990-6384, Fax: 82-51-253-1176

E-mail: kmcpet@ns.kosinmed.or.kr

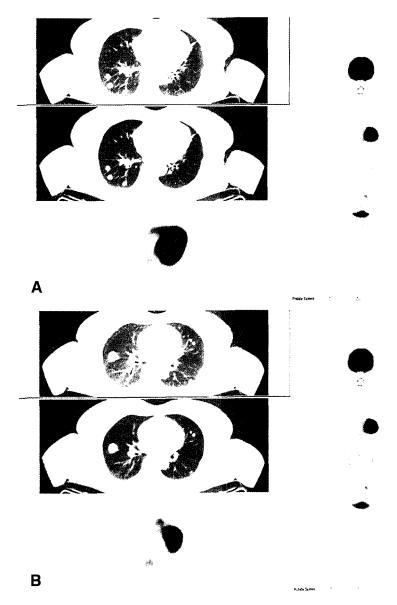


Fig. 2. The ¹⁸F-FDG PET/CT was obtained for further evaluation for the primary malignant lesion. There was no definite abnormal FDG uptake in multiple pulmonary nodules(A), except for very faint FDG uptake in largest one(B, >2cm). Finally these lesion were diagnosed as benign metastasizing leiomyoma on pathological evaluation

References

- Arif S, Ganesan R, Spooner D. Intravascular leiomyomatosis and benign metastasizing leiomyoma: an unusual case. *Int J Gynecol Cancer* 2006;16:1448-50.
- 2. Mark S.A. Multiple benign lung tumors. *Semin Thorac Cardiovasc Surg* 2003;15(3):310-4.
- Tietze L, Gunther K, Horbe A, Pawlik C, Klosterhalfen B, Handt S, Merkelbach-Bruse S. Benign metastasizing leiomyoma: a cytogenetically blanced but clonal disease. *Hum Pathol* 2006;31: 126-8.
- 4. Horstmann JP, Pietra GG, Harman JA, Cole NG, Grinspan S. Spontaneous regression of pulmonary leiomyomas during pregnancy. *Cancer* 1977;39(1):314-21.