Title: F-18 FDG PET scan 20 years after talc pleurodesis: Report of 3 cases

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Body: FDG PET scan is used with increasing frequency to investigate pleural abnormalities and determine the possibility of neoplastic invasion. Talc pleurodesis has been reported to cause hypermetabolic pleural thickenings and masses, up to 5 years after the procedure. We report 3 cases of patients who required talc pleurodesis for pneumothoraces in 1989 and 1990 with satisfying results, and who were investigated in 2010-2011 for pleural abnormalities, with positive TEP results, which were deemed secondary to the pleurodesis. Talc pleurodesis functions by creating inflammation, therefore promoting pleural adhesions. The metabolism surrounding this inflammatory reaction could decrease with time, as in other inflammatory processes. However, the fact that talc itself is not metabolized by the body would explain the positive FDG PET scan, possibly as a foreign body reaction. We discuss radiological differences that can be used to differentiate between hypermetabolic talcoma and neoplastic disease. Conclusion Talc pleurodesis can induce an inflammatory reaction, even 20 years after being performed. In patients with pleural abnormalities, it is important to question such procedures and mention them to colleagues interpreting metabolic imaging.