FIGURE 1. Ratio of ascending aortic volume compared with total aortic volume.

length of the aorta and avoid unnecessary operations due to high volume values, we suggest calculating the ratio of ascending aortic volume/total aortic volume (Figure 1). Predisposing factors for increased growth, such as persistent hypertension, smoking, connective tissue disease, or dysfunctional bicuspid aortic valve, should also be taken into account and shorter follow-up times recommended in those patients.

There is consensus that a bicuspid aortic valve with malfunction contributes to the progress of aortic dilatation. However, in our analysis, a bicuspid valve was present in 20% of patients with a maximum diameter of the ascending aorta of 4.4 ± 0.6 cm at the time of first scan and was not a significant predisposing factor for increased growth. Please note that this is not an analysis of predisposing factors for aortic dilatation itself. We still recommend close follow-up for those patients because the risk of rapid growth, dissection, or rupture may be increased.

As we already stated, it is difficult to explain our finding that low-dose aspirin decreases growth of the aneurysms. Before changing any recommendations regarding medication, further investigation is needed.

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PREOPERATIVE POSITRON EMISSION TOMOGRAPHY/COMPUTED TOMOGRAPHY IN PULMONARY GROUND GLASS OPACITIES: A USEFUL DIAGNOSTIC AND STAGING TOOL OR NOT?

To the Editor:

We have read with interest the article by Cho and colleagues,¹ focused on the utility of positron emission tomography (PET)/computed tomography (CT) in the preoperative staging of patients with pure ground glass opacity (GGO) adenocarcinoma. Its background is the diffuse suggestion that pure GGOs have favorable behavior, because cancer-specific survival approaches 100% in surgically treated patients.² These outcomes are due to the absence of lymphatic/hematic tumor spreading as supported by some articles reporting no nodal involvement at pathologic examination in patients who underwent surgery.³ This suggests that clinical staging workup should be reconsidered.

The authors compared preoperative PET/CT findings and pathologic nodal examination in operated patients affected by pure GGOs. Because pathologic nodal 18-fluorodeoxyglucose uptake at PET/CT was always absent, except in 2 cases that resulted in non-neoplastic nodes, and all the nodes removed were negative for cancer, they concluded that preoperative PET/CT is not necessary.

Their conclusions are interesting; however, we have some criticisms, and the most important is that the median of nodal stations extracted was 4.1 and 51 patients did not even undergo nodal dissection. In our opinion, complete nodal dissection is mandatory to support the absence of lymphatic spreading.

More generally, we underline that preoperative PET/CT is performed not only to complete tumor staging but also to obtain diagnostic information about the nodule. In fact, some authors have showed that nonsolid adenocarcinoma is prone to be false-negative on PET/CT,⁴ but it has been shown that GGOs adenocarcinoma exhibit positivity on PET/CT in case of invasive features.⁵

Our conclusion is that the diagnostic role of PET/CT in pure GGOs currently is still uncertain, and more data are needed to determine the role of PET/CT in pure GGOs before leaving preoperative PET/CT in pure GGOs.

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IS PREOPERATIVE POSITRON EMISSION TOMOGRAPHY–COMPUTED TOMOGRAPHY A USEFUL DIAGNOSTIC OR STAGING TOOL FOR PURE GROUND GLASS OPACITY NODULAR ADENOCARCINOMAS?

Reply to the Editor:

We thank Baisi and colleagues for their interest in our work. As they pointed out in their letter, we were unable to make a pathologic diagnosis of nodal status in 51 patients. These patients, however, had peripherally located pure ground glass opacity (GGO) nodules without enlarged lymph nodes (LNs) on preoperative chest computed tomography (CT). All these patients underwent follow-up chest CT and positron emission tomography–computed tomography (PET/CT), and there was neither enlargement of LNs nor glucose uptake during a mean period of 47.9 months. This result supports the surmise that there was no LN metastasis even in the patients who did not undergo LN dissection. These findings are supported by previous reports that a PET or PET/CT scan is not required in patients with peripherally located stage IA adenocarcinomas, including pure GGO nodular adenocarcinoma.¹⁻¹¹

Second, regarding the usefulness of PET/CT for the information of the invasiveness of pure GGO nodules, we still doubt that PET/CT is really necessary in terms of cost-effectiveness. Of course, several recent studies have demonstrated that invasive adenocarcinoma may also be pure GGO nodules, particularly in well-differentiated or well-organized acinar or papillary-predominant adenocarcinomas.^{3,4,8,11-13} However, given that invasive adenocarcinomas manifesting as pure GGO nodule showed no tumor recurrence and tended to

show relatively less aggressive behavior than tumors with part-solid or solid feature, we think PET/CT adds little value as well when it comes to prognostic stratification. Moreover, PET/CT might not change the operation method even if a GGO nodule shows a positive glucose uptake suggesting invasiveness. With regard to the extent of surgical resection, limited resection is acceptable when feasible, even though some GGO nodules were invasive adenocarcinomas. This is because, even when limited resection was performed, there were no cases of local recurrence or mediastinal LN metastasis, consistent with previous data.^{3,11,13} Moreover, patients with pure GGO nodules have a relatively high probability of second primary GGO nodules in other lobes.¹⁴ Recently, an increasing number of studies have reported that limited resection rather than lobectomy is sufficient for the treatment of pure GGO nodule type primary lung cancer, and systematic nodal dissection may not be required.^{3,4,15}

Our study was inherently limited by its retrospective design, and it may have had a selection bias because of its relatively small cohort. We therefore agree that further prospective studies with large cohorts should be performed to evaluate the utility of preoperative PET/CT and brain magnetic resonance imaging.

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