Watching Small Lung Lesions Do Nothing: “Ground Glass Opacities” Don’t Progress Over Years If They’re Watched, Not Resected

In one of my earliest posts about bronchioloalveolar carcinoma (BAC) (in the dark ages, pre-Twitter), I wrote on the subject of managing small BAC-type lesions, which tend to appear as small hazy areas called “ground glass opacities” (GGOs) and suggested that some of these cancers may be so indolent that they don’t need to be treated, even if they have the word “carcinoma” in the diagnosis.

Now there is a proposal to change BAC to “adenocarcinoma in situ, a pre-cancerous condition, reflecting the idea that these lesions have such a favorable prognosis that they shouldn’t necessarily be put in the same category as invasive lung cancers (pure BAC is a non-invasive lesion that shouldn’t be able to get into the bloodstream and spread outside of the lungs). And now, there’s a new article out of Japan that describes the experience of patients with BAC and multiple GGOs, some of which were resected and some not very accessible and some just watched. It turned out that just watching seemed to be a pretty good strategy.

The article out of Korea was published in the Journal of Thoracic Oncology and describes the experience of 73 patients with pathology-proven BAC, among whom 23 had other small GGOs identified pre-operatively. They followed patients after surgery for a median of 40 months and found that none of the patients with one or more identified small GGOs (<1 cm was their limit) showed any growth of these lesions; most stayed the same, and a few lesions actually regressed (they may not have been BAC and could have been inflammation or infection). They certainly had no impact on survival. Though the results are limited by the relatively short follow-up (just over 3 years of follow-up doesn’t mean people are out of the woods), they do
suggest that it’s reasonable to use a watch and wait approach, at least for GGOs (which don’t have a solid component that suggests an invasive cancer) that are less than a centimeter (larger tumors are more likely to have some area(s) of invasiveness).

I’ve had several patients in whom there was one or a few growing lesions, perhaps with a solid component, along with several tiny background nodules that you aren’t sure how to manage. They may represent “multifocal BAC”, but often these areas are too small and inaccessible to sample. This work suggests that it’s appropriate to take your chances and ignore them.

In Japan and some other parts of Asia, the surgery they do for small BAC lesions is typically a wedge resection or segmentectomy rather than a full lobectomy, and this work is consistent with the idea that if you’re going to do surgery on small GGOs/proven BAC lesions, a complete lobectomy may remove far more good lung tissue than necessary.

To me, this work really raises the question of whether surgery is doing anything of value at all (at least if there are any other lesions left behind), if these lesions can sit there and do nothing for years at a time, and there’s only a finite amount of lung tissue someone can afford to lose to the scalpel or to disease (at some point in the future). While there is certainly a range of clinical behavior for BAC, I’m impressed with this evidence supporting a “less is more” approach and suggesting that these patients and their lesions may do well no matter what you do or don’t do.