Experience and patient selection are the keys to successful surgical treatment for nonlocalized bronchiectasis

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Bronchiectasis is not a condition that is commonly treated by thoracic surgeons in North America and patients who do come to surgical attention have localized disease where a complete, presumably curative, resection is possible. An even rarer situation is the consideration of surgical therapy for patients with nonlocalized bronchiectasis because the multifocal aspect of the disease is often deemed incurable and resection may result in significant loss of pulmonary function.

Dai and colleagues¹ describe their experience with surgical treatment of nonlocalized bronchiectasis wherein the dominant lesion was resected by lobectomy in patients who failed medical therapy. The authors report no operative mortality and a very respectable morbidity rate of 21%. At 1 year of complete follow-up, patients reported significant clinical improvement as determined by frequency of acute infection, frequency of hemoptysis, volume of sputum production, rates of positive sputum cultures, and dyspnea score. Patient satisfaction assessment was excellent in 62%, good in 27%, and no change or worse in 11%. Dai and colleagues are to be congratulated on achieving such good results in this difficult patient population. Certainly, the authors have much experience with the surgical treatment of bronchiectasis, as demonstrated by their prior report of 790 patients with localized bronchiectasis undergoing resection.²

Several important points need to be stressed regarding the current article by Dai and colleagues.¹ First, the study cohort was a highly selected group. This, in addition to intensive perioperative care, contributed to the authors' success. The patients were young, had good pulmonary function, were all responders to preoperative medical optimization, and the extent of remaining nondominant bronchiectasis was small and mainly confined to a single other lobe. Second, mean follow-up was only 15 months. With short follow-up, it is unknown whether the reported benefits of resection are maintained long-term. Third, the etiology of bronchiectasis is not provided, important data that provide readers with valuable information for determining the applicability of this treatment regimen to their own clinical practice. Finally, readers must not mistakenly

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Central Message

Resection of the dominant lesion for nonlocalized bronchiectasis can result in significant clinical improvement. Surgeon experience and patient selection are keys to achieving good outcomes.

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interpret that lobectomy is the optimal treatment for nonlocalized bronchiectasis. It must be remembered that these patients first failed medical therapy and that the study population received lobectomy due to the extent of the dominant disease and not as routine treatment. Due to the multifocal aspect of the disease, sublobar resection should always be considered first to preserve as much lung function as possible.

Despite these limitations, this article by Dai and colleagues¹ is an important contribution to the literature because it raises awareness that surgery is a treatment option to consider in selected patients with nonlocalized bronchiectasis. The article provides important details regarding patient selection and the intensive preoperative and postoperative treatment regimens that are required to achieve successful outcomes.

Moving forward, it will be important to evaluate a larger number of patients and provide long-term follow-up data not only to confirm these results, but also to assess factors associated with poor outcomes. Also, it will be important to evaluate resection by thoracoscopy in this patient population to assess whether outcomes can be improved with minimally invasive approaches.

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