Do Pulmonologists Need to Tighten up Their Sphincter Tone?

Do Pulmonologists Need More Guts?

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Although reports on transbronchial needle injections (TBNI) were made as early as 1965, a systematic review of its application has only recently been reported by Seymour et al. [1] in this current issue of *Respiration*. This paper is an interesting and comprehensive overview of the published literature on the diagnostic and therapeutic capabilities of TBNI, with special emphasis on its role in the management of various pathological conditions using specific injectable agents. Surprisingly, TBNI has not gained much popularity amongst bronchoscopists, resulting in no randomized controlled trials that can effectively demonstrate its potential value as an armament in the pulmonologists' fight against various respiratory diseases.

In contrast, this technique is widely used effectively by our gastroenterology colleagues as a management modality for a variety of digestive tract diseases: ethoxysclerol [2], human thrombin [3], histoacryl [4] or polidocanol [5] for bleeding peptic ulcers, botulinum for achalasia [6], N-butyl-2-cyanoacrylate for pancreatic fistulas [7], inert implantable materials and non-resorbable copolymers for gastroesophageal reflux disease [8, 9], enbucrilate for mycotic aneurysms [10], hydroxypropyl methylcellulose or photocrosslinkable chitosan for cancer or polyp resection [11, 12], or alcohol, various anticancer agents and local immunotherapy for digestive tract cancers [13], to mention a few.

The reason for this disparity between gastroenterologists and pulmonologists is unclear. One may postulate that there are more gastroenterologists with expertise in

delivering endoscopic therapies due to the higher incidence of gastrointestinal (GI) diseases (such as bleeding peptic ulcer) that are amenable to such therapeutic modalities. The other reason (and a more philosophical one) may have something to do with the basic characteristics of GI or pulmonary physicians. Could it be that the physicians who choose gastroenterology as a profession are more likely to take (calculated) risks than those who choose pulmonary medicine? In other words, are the GI folks 'gutsier' than the pulmonologists when it comes to performing procedures?

This unfortunately seems to be at least in part true. Although pulmonologists do an outstanding job unraveling complex pulmonary cases, and have excellent command over pulmonary physiology and function, they seem to shy away from their bronchoscope, and appear to consider it as an awkward, difficult-to-handle instrument whose sole purpose is to make life more difficult for the patient and the physician. Surveys have shown that the majority of pulmonologists use the bronchoscope mainly for tissue diagnosis of a suspected pulmonary lesion, assessment of hemoptysis, and occasionally for identifying an infectious agent, or determining the cause for a patient's interstitial lung disease. Only a minority uses the instrument for techniques that are unfortunately considered as 'more elaborate'. For instance, only a quarter of pulmonologists ever perform transbronchial needle aspiration, while only 15% perform interventional techniques such as electrocautery or stenting [14].

The study by Seymour et al. [1] is therefore pivotal: not only does it extensively review the published literature on the potential application of TBNI providing encouragement for future research in this field, but it also makes us realize that the bronchoscope is more than a 'necessary evil'. Flexible bronchoscopy, when performed by well-trained professionals using careful preparation (local anesthesia, judicious use of sedatives), is equally or even better tolerated than gastroscopy [pers. unpubl. data]. Once one has mastered the instrument, expansion of its indications and use will follow automatically. Thus, without using the word 'TBNI', we have used the bronchoscope to inject corticosteroids in the prevention of bronchial stenosis in cases of endobronchial tuberculosis [15], injected adenovirus-mediated wild-type p53 for treatment of lung cancer [16], and have inserted gelfoam in the treatment of bronchopleural fistulas [17]. It is probable that there are several other interesting unreported cases by other pulmonologists who require encouragement and opportunity to publish and share their experience. We are convinced that in the future many pulmonologists will expand the use of the bronchoscope beyond

the simple tumor biopsy or bronchial aspirate, once they have learned to master and appreciate this tool.

Therefore, the lessons to be learned from this paper, are:

- 1 Learn to appreciate the bronchoscope: review your technique, correct it when necessary, and expand its use.
- 2 Do not shy away from using your bronchoscope when indicated: your patients may not love it, but they do prefer it over other endoscopic modalities.
- 3 Browse through the GI literature from time to time: it may provide you with some novel ideas that may apply to bronchoscopic procedures.
- 4 Report your TBNI experiences and ideas; collaborate with others, and design and perform randomized, controlled trials.

In order to achieve these goals it may be that pulmonologists need to become more 'gutsy' and accept taking calculated risks with the bronchoscope in order to expand the therapeutic modalities that could be provided to our pulmonary patients.

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