**Table 1 — Maximal Expiratory Flow Rates Divided by Vital Capacity**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>( \dot{V}_{\text{max}}75%/\text{VC} )</th>
<th>( \dot{V}_{\text{max}}50%/\text{VC} )</th>
<th>( \dot{V}_{\text{max}}25%/\text{VC} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal (n = 201)</td>
<td>1.74</td>
<td>1.30</td>
<td>0.703</td>
</tr>
<tr>
<td>SD</td>
<td>0.52</td>
<td>0.346</td>
<td>0.212</td>
</tr>
<tr>
<td>CL</td>
<td>1.66-1.81</td>
<td>1.25-1.35</td>
<td>0.64-0.71</td>
</tr>
<tr>
<td>COLD (n = 166)</td>
<td>0.82</td>
<td>0.455</td>
<td>0.238</td>
</tr>
<tr>
<td>SD</td>
<td>0.428</td>
<td>0.255</td>
<td>0.12</td>
</tr>
<tr>
<td>CL</td>
<td>0.737-0.904</td>
<td>0.405-0.504</td>
<td>0.215-0.262</td>
</tr>
<tr>
<td>ILD (n = 30)</td>
<td>2.12</td>
<td>1.67</td>
<td>0.903</td>
</tr>
<tr>
<td>SD</td>
<td>0.68</td>
<td>0.75</td>
<td>0.30</td>
</tr>
<tr>
<td>CL</td>
<td>1.87-2.38</td>
<td>1.39-1.95</td>
<td>0.72-1.02</td>
</tr>
</tbody>
</table>

*COLD = chronic obstructive lung disease; ILD = interstitial lung disease; \( \dot{V}_{\text{max}} = \) forced expiratory flow when the lung is at a given percentage of its vital capacity; VC = vital capacity; SD = standard deviation; CL = confidence limits with 0.05 risk.

Our preliminary study suggests that maximal expiratory flow rate divided by VC can be used as a predictive value in evaluating flow-volume loops.

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**REFERENCE**


**Chronic Cough Caused by Endobronchial Sutures**

**To the Editor:**

I was fascinated by the case report by Shure,1 which appeared in the November 1991 issue of Chest. Dr Shure reported chronic cough caused by endobronchial sutures in adults. We have dealt with a similar situation.

The patient presented at the age of 13 years with marked wheezing on exercise. A chest x-ray film showed an air-trapping lesion in the left main-stem bronchus. An adenoma was seen at bronchoscopy and resected at thoracotomy, and the boy progressed well. Two years later he developed an intractable cough, which was not associated with abnormalities on examination or at radiography; however, there was minor reduction in FEV1. A trial of bronchodilators and inhaled corticosteroids was made without success. At bronchoscopy, granulation tissue was seen at the site of the anastomosis, and the presence of a silk suture was obvious. The suture could not be removed by forceps. It was vaporized by laser treatment. Examination of a biopsy specimen revealed granulation tissue only, without recurrence of the tumor. The boy's cough resolved quickly and has not recurring during a two-year follow-up period.

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**REFERENCE**

1 Shure D. Endobronchial suture: a foreign body causing chronic cough. Chest 1991; 100:1193-96

**To the Editor:**

Dr Mitchell describes an interesting case of symptomatic endobronchial suture occurring remote from the surgical procedure, similar to the cases described in my recent report. Dr Mitchell's successful removal (by vaporization) of the suture with a laser is similar to that reported by Unger.1 While lasers can certainly eliminate suture material, it will be interesting to see what can be achieved with the wider use of endoscopic scissors, rather than conventional biopsy forceps, in the treatment of this condition. If future experience is similar to that described in my series, this technique offers a lower risk and less expensive approach to the problem.

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**Surgical Correction of Posttraumatic Ventricular Septal Defect via the Right Atrium**

**To the Editor:**

I was somewhat disappointed by the article by Sisto et al.,1 which appeared in the November 1991 issue of Chest. Their article reports on four patients seen in their institution between 1983 and 1989, in whom a transatrial repair of a posttraumatic ventricular septal defect (VSD) was undertaken. They discussed four patients; however, they did not inform us whether there were other patients during that same time period with a similar diagnosis. They at no point in the article compare the transatrial repair of a VSD with other methods of repair.

Patient data are not available in the article. We are not told of the patients' ages nor of any other medical conditions. Perhaps the most bothersome part of the article is that although they state that surgery is indicated when the QP:QS ratio is greater than 2:1, they give no indication as to the results of medical therapy in a similar group. Although this is not a study article comparing two different groups, it would be difficult for me to imagine that their results would be poor considering that they state that their patients "were treated expectantly without any medication" and underwent elective cardiac catheterization. As Dr Daggett has pointed out in the past,1,2 these patients appear to be self-selected and one would expect them to do well. My question remains, however, if they were doing well without medication, was the indication for surgery based solely on the cardiac catheterization data?

My congratulations to Dr Sisto and his group for their four successful cases of posttraumatic VSD repair via the right atrium.

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**REFERENCES**

Bronchoscropy in North America

The ACCP Survey

To the Editor:

We have read the articles by Prakash et al.,1,4 which appeared in the December 1991 issue of Chest, and we commend them for their involved efforts with the ACCP bronchoscopy survey. Our comments specifically refer to the authors’ recommendation1 that fluoroscopy be utilized to identify the “maximally abnormal” areas prior to transbronchial biopsy. While our data confirm that fluoroscopy will increase the yield from transbronchial biopsy of focal lesions, the yields from diffuse disease processes, such as sarcoidosis and lymphangitic carcinomatosis, are approximately the same between fluoroscopy and no fluoroscopy. This finding is further supported by a study published in 1988 involving 250 bronchoscopic procedures performed in patients with acquired immunodeficiency syndrome or human immunodeficiency virus seropositivity who had diffuse roentgenographic findings.4 In this study, the safety and the yield were favorable when transbronchial biopsies performed without fluoroscopy were compared to biopsies done with fluoroscopy. This study does not document a greater than 250 cases in which the fluoroscopy/no fluoroscopy question has been examined, and the concept of transbronchial biopsy without fluoroscopy has been shown to be safe and effective in diffuse disease. The American Thoracic Society deleted the recommendation for routine fluoroscopy with transbronchial biopsy in its official position paper on guidelines for fiberoptic bronchoscopy in adults.6

Finally, we concur with the authors’ suggestion that additional studies may be beneficial when defining what the practice standard for bronchoscopy should be in North America. Only through meaningful interchange leading to consensus can such a standard be defined.

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The opinions or assertions contained herein are the private views of the authors and are not to be construed as reflecting the views of the Department of the Army or the Department of Defense.

REFERENCES


To the Editor:

We read with interest about the ACCP survey.1 However, the survey did not address topical anesthesia, which in our experience, has been a difficult part of the procedure for many patients. The gagging, coughing, and taste of the anesthesia spray often increase the patient’s anxiety level before the procedure has begun. We initially did a limited telephone survey on topical anesthesia preferences for bronchoscopy at teaching institutions throughout the country and found that there was no consensus on the drug of choice, although lidocaine and benzocaine were the topical anesthetics used most often. In the editorial on the bronchoscopy survey,1 Prakash and Stubbs state that “the majority of bronchoscopists use lidocaine,” although we could find no recent data to confirm this impression. A review of the literature showed that both lidocaine and benzocaine are safe, well tolerated, and widely used, although there is no literature directly comparing the two drugs, especially with regard to taste and patient preference.4,5

We compared benzocaine 20% spray (Hurricane; Beutlich) and lidocaine 4% delivered by atomizer to examine patients’ taste...