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Lung nodule management practice patterns – A survey of Indian physicians

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Sir,

A lung nodule is a rounded opacity, well or poorly defined, measuring up to 3 cm in diameter.[1] The majority of such lesions are benign, but malignancy needs to be excluded in most. Nodules may be detected incidentally or by screening. Indeed, lung cancer screening has demonstrated mortality benefits in the national lung screening trial in the United States.[2] Applying these recommendations to the Indian population is controversial since there are no evidence-based guidelines on lung nodule detection and management that take into consideration indigenous factors such as prevalence of lung cancer and available local resources. It may be speculated that implementing consensus guidelines for lung nodule management in Asia[3] may more closely mimic the Indian population. We conducted a survey in three metropolitan cities across India to identify perspectives of physicians managing lung nodules.

We surveyed 210 participants, of whom 165 (78.5%) answered every question. Of those answering, 144 (72.3%), 18 (9%), and 12 (6%) respondents were practicing pulmonologists, internists, and general practitioners, respectively. Furthermore, 121 (73.3%), 108 (58%), and 140 (67.3%) respondents were aware of the size ranges of micronodules, nodules, and masses, respectively. Further, 165 (78.5%) respondents answered that they saw up to five patients a month with incidental nodules. In addition, 140 (70%) physicians felt on clinical grounds that up to 10% of their patients had multiple nodules attributable to the prior granulomatous disease. Table 1 indicates the distribution of responses by physicians of percentage of patients with an eventual histologic diagnosis of the nodules. Majority of respondents reported using either chest or Fleischner Society guidelines for nodule management. Majority of nodules...
were visualized using physical films \( n = 131; \) 74\%) for radiographic imaging. A total of 70 (35.9\%) respondents utilized a multidisciplinary approach (1 pulmonologist and any two specialists from radiology, medical oncology and/or surgery).

Through this survey, we aim to highlight the heterogeneity in practice patterns of physicians managing lung nodules in India. Intuitively, formulating guidelines for lung cancer screening and incidental nodules should reduce this variability. However, the situation is complex with a great deal of variability in patient education, perspectives, preferences, and available resources. Furthermore, the prevalence of nodules may vary greatly due to endemic granulomatous diseases, which may make it more difficult to make recommendations for tissue diagnosis.

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**Conflicts of interest**

There are no conflicts of interest.

**REFERENCES**


**Figures and Tables**
### Table 1
Eventual histologic diagnosis of lung nodules - Distribution of responses

<table>
<thead>
<tr>
<th>Percentage patients with histologic diagnosis</th>
<th>Number of respondents, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>74 (39.3)</td>
</tr>
<tr>
<td>6-10</td>
<td>49 (26)</td>
</tr>
<tr>
<td>11-15</td>
<td>19 (10.1)</td>
</tr>
<tr>
<td>&gt;15</td>
<td>46 (24.4)</td>
</tr>
</tbody>
</table>

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