Search Strategies: Vegetable Foreign Body Mimicking as a Suspicious Pulmonary Nodule in an Adult Patient with a History of Lung Cancer; Microscopic Diagnosis of Vegetable Aspiration

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Search Strategies: Vegetable Foreign Body Mimicking as a Suspicious Pulmonary Nodule in an Adult Patient with a History of Lung Cancer; Microscopic Diagnosis of Vegetable Aspiration

Ali Imran Saeed, M.D.; Abdul Rahman Ahmad, M.D. and Jonathan D. Eldredge, Ph.D.

Purpose:

To search in the PubMed and Web of Science databases to identify similar reports and submit this interesting case report in the “postgraduate educational corner” of the CHEST journal.

PubMed:

MeSH term: To initiate the searches in PubMed, MeSH terms were selected by reviewing different articles. On October 3, 2013 following MeSH term searches were performed to identify articles of interest.

Table 1:

<table>
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<th>Searches</th>
<th>MeSH</th>
<th>References</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>Respiratory Aspiration OR Foreign Bodies OR Bronchoscopy</td>
<td>59716</td>
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<td>135</td>
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<td>4</td>
<td>Bronchoscopy AND Vegetables</td>
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</tbody>
</table>

The reference articles identified by the second search strategy were reviewed in detail. These articles focus on foreign body aspiration in children and adults, aspiration of tooth-dentures and review articles describing institutional experience of foreign body removal using rigid or flexible bronchoscope. No reference to an article directly addressing vegetable aspiration identified. Interestingly the MeSH term “Respiratory Aspiration” was introduced in 2007 and all the search strategies referenced articles after 2008. The subsequent search strategies did not reveal any additional article pertinent to the report.

On October 18, 2013 following MeSH term searches were performed to identify articles of interest in Pub Med.

Table 2:

<table>
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</table>
References identified in the second search strategy were reviewed and then ten pertinent articles selected. Vegetable aspiration in adults is usually associated with an underlying predisposing condition or risk factor i.e. mental retardation, neuromuscular diseases etc.\(^1\) Similarly in children; in addition to the predisposing condition the shape and texture of the vegetable increases the risk \(^5-^8\).

Heigener D, et al. (article in German) describes foreign body aspiration mimicking lung cancer \(^9\) similar to the clinical and radiographic presentation of our patient with two cm pulmonary nodule in the left lower lobe. He was followed for two years with serial computed tomographic scan of chest. This article was excluded since it was published in a non-English language. Other articles were excluded if they were more than 30 years old.

Kuschner WG et al. describe diagnosis of vegetable aspiration by microscopy \(^10\). This article is most pertinent to our search and narrates a similar diagnostic approach.

**Web of Knowledge:**

Web of Knowledge with the “All Databases” search option was used to identify additional pertinent references. This search strategy revealed eight references, but no additional reference pertinent to the current search. The search strategy consisted of the following:

- Topic=(aspiration pneumonia) AND Topic=(bronchoscopy) AND Topic=(vegetable)
- Timespan=All years
- Search language=English

**References:**


