a priori, a low probability of the diagnosis. Therefore, in the same 
session, EUS-B-FNA was performed. By means of this technique, 
lung lesions were identified at 24 and 21 cm, respectively, from 
the dental arch. The results of the transesophageal needle biopsy 
revealed epidermoid carcinoma in the first case (Fig. 1) and adeno-
carcinoma in the second.

EUS-B-FNA has a diagnostic performance similar to digestible 
digestive endoscopic ultrasound in staging the mediastinum,\(^1,2\) while reduc-
ing the initial investment, costs of the procedure and technique 
time.\(^4\) However, current endobronchial ultrasound is not able to 
access extrathoracic locations and has less ultrasound resolution 
and penetration than digestive endoscopic ultrasound, whose scan 
range is much wider.\(^1\) Therefore, it has been proposed to develop a 
specific hybrid endobronchial ultrasound that is somewhat longer 
and incorporates some minor design changes, such as the variable 
adjustment of the needle.\(^2\)

In addition to the benefits from a logistic standpoint, another 
advantage of the esophageal use of the endobronchial ultrasound 
is its being better tolerated than the tracheal approach in patients 
with severe cough despite adequate sedation and in individu-
als with compromised lung function,\(^4\) as in the case number 1 
that we have provided. Currently, EUS-FNA constitutes the pre-
ferred method for the staging of esophageal cancer,\(^3\) and the 
possible role of EUS-B-FNA in this situation is not known. The use 
of the endobronchial ultrasound through the esophagus for the nee-
dle aspiration of lung masses has only been reported in three cases 
of the first series by Hwangbo et al.\(^1\) In the latter two cases of 
our paper, the diagnosis of bronchogenic carcinoma was obtained 
by means of EUS-B-FNA in the same session as the bronchoscopic 
techniques and with one single operator, which avoided further 
explorations.

Endobronchial ultrasound, used with both tracheal and esophageal approaches, offers almost complete staging of the 
mediastinum with one instrument and in just one session.\(^4\) In 
addition, in the same way that endobronchual ultrasound has 
demonstrated its utility in establishing the primary diagnosis of 
lung cancer,\(^6\) transesophageal needle aspiration guided by endo-
bronchial ultrasound could be applied to the same end, either as 
an initial technique or after performing bronchoscopic explo-
lations.

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and transesophageal fine-needle aspiration using an ultrasound broncho-
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dad de una consulta monográfica de diagnóstico rápido de cáncer de pulmón. 

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Exposure to Second-hand Smoke and Dental Caries in 
Children\(^5\)

Exposición pasiva al tabaco y caries dental de los niños

Dear Editor:

In 1986, the report of the US Surgeon General and the National 
Research Council showed the available evidence about the adverse 
effects of passive exposure to tobacco smoke and health in 
children.\(^1\) Later reports identified more effects of second-hand 
smoke in children and indicated that this exposure was the cause 
of numerous consequences in exposed children.\(^2\)

There is conclusive evidence of the relationship between the 
passive exposure to tobacco smoke and the presentation of respi-
atory symptoms.\(^3,4\) We present in this study the increased risk for 
dental caries in both primary as well as permanent teeth in children 
whose parents are smokers.

In a sample of 281 children aged 5–14 who were seen consec-
uitively in a primary care center and in whom we initially were 
studying the relationship between the presence of caries with den-
tal hygiene and dietary habits,\(^5\) we would like to show the results 
that we have found with regards to the exposure to parental tobacco 
smoke and the presence of caries in their children. The dental 
examination was done by two dentists in accordance with the 
methodology of the World Health Organization. By means of struc-
tured questionnaires, we determined the frequency of brushing, 
consumption of sweets and tobacco use of the children's parents. 
After the descriptive study, a multivariate logistic regression analy-
sis was done, using the presence or absence of caries as a dependent 
variable, both in primary as well as in permanent teeth. Table 1 
demonstrates that the prevalence of caries in the univariate analy-
ysis increases progressively as tobacco habit increases among the 
parents of the children, going from 12.4% in children whose par-
ents do not smoke to 28.3% if both parents smoke, in permanent 
teeth. The same phenomenon is observed in primary teeth, going 
from 21.6% to 34.8%. After the multivariate analysis, adjusting for 
age, consumption of sweets, frequency of brushing and exposure to 
second-hand smoke, a progressive increase in the risk for caries is 
observed, which, although did not reach statistical significance, 
is consistent with studies that show the increase in the risk for 
caries with the exposure to tobacco smoke.\(^5\) These data suggest a 
dose–response effect between the tobacco habit of the parents and 
the probability of having caries consistent with what is known 
regarding physiopathological mechanisms of and their biological 
plausibility.

Table 1

<table>
<thead>
<tr>
<th>Presence or absence of caries in permanent and primary teeth, according to different variables.</th>
<th>No</th>
<th>Yes</th>
<th>Crude OR</th>
<th>Adjusted OR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caries of permanent teeth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>1.54 (1.34; 1.77)</td>
<td>1.58 (1.35; 1.86)</td>
</tr>
<tr>
<td>Consumption of sweets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>92 (87.6%)</td>
<td>13 (12.4%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yes</td>
<td>135 (77.6%)</td>
<td>39 (22.4%)</td>
<td>2.04 (1.03; 4.04)</td>
<td>1.89 (0.79; 4.50)</td>
</tr>
<tr>
<td>Brush teeth at least once a week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>205 (83.3%)</td>
<td>41 (16.7%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>23 (65.7%)</td>
<td>12 (34.3%)</td>
<td>2.61 (1.20; 5.70)</td>
<td>3.18 (1.10; 9.14)</td>
</tr>
<tr>
<td>Parents’ tobacco use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither parent smokes</td>
<td>85 (87.6%)</td>
<td>12 (12.4%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>One parent smokes</td>
<td>88 (80.7%)</td>
<td>21 (19.3%)</td>
<td>1.69 (0.78; 3.65)</td>
<td>1.47 (0.62; 3.47)</td>
</tr>
<tr>
<td>Both parents smoke</td>
<td>33 (71.7%)</td>
<td>13 (28.3%)</td>
<td>2.80 (1.16; 6.74)</td>
<td>2.09 (0.74; 5.86)</td>
</tr>
<tr>
<td><strong>Caries of primary teeth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>0.90 (0.82; 0.99)</td>
<td>0.89 (0.79; 0.99)</td>
</tr>
<tr>
<td>Consumption of sweets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>86 (81.9%)</td>
<td>19 (18.1%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yes</td>
<td>128 (73.6%)</td>
<td>46 (26.4%)</td>
<td>1.63 (0.89; 2.96)</td>
<td>1.85 (0.92; 3.74)</td>
</tr>
<tr>
<td>Brush teeth at least once a week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>194 (78.9%)</td>
<td>52 (21.1%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>21 (60.0%)</td>
<td>14 (40.0%)</td>
<td>2.49 (1.18; 5.22)</td>
<td>2.20 (0.93; 5.23)</td>
</tr>
<tr>
<td>Parents’ tobacco use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither parent smokes</td>
<td>76 (78.4%)</td>
<td>21 (21.6%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>One parent smokes</td>
<td>86 (78.9%)</td>
<td>23 (21.1%)</td>
<td>0.97 (0.49; 1.89)</td>
<td>1.12 (0.55; 2.28)</td>
</tr>
<tr>
<td>Both parents smoke</td>
<td>30 (65.2%)</td>
<td>16 (34.8%)</td>
<td>1.93 (0.89; 4.19)</td>
<td>1.89 (0.82; 4.37)</td>
</tr>
</tbody>
</table>

References


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Effectiveness of High-Flow Oxygen Therapy With Warm Humidification in a COPD Patient With Chronic Cough

Eficacia de la oxigenoterapia de alto flujo con humidificación térmica en un paciente EPOC con tos crónica

Dear Editor:

The administration of home oxygen therapy (HOT) through a nasal cannula is an essential therapeutic measure in the treatment of patients with COPD and chronic respiratory failure.1 When it is well indicated, its benefits are clear and evident. However, the continued administration of oxygen can present important side effects, among which are those related with the exposure to cold, dry air. Epistaxis, mucosa dryness, thick secretions that are difficult to eliminate and cough are some of the problems that our patients complain of with HOT.2 Recently, “high-flow” oxygen therapy equipment has appeared on the market, which is able to provide all the gas inspired by the patient and which also incorporates the possibility to warm the air to 37 °C with a humidity of 100%. We present the case of a grade IV COPD patient with HOT and chronic cough in whom the application of oxygen through a system of active humidification was able to eliminate the cough.

Clinical Notes

The patient is a 72-year old diagnosed with grade IV COPD treated with HOT at 2 l/min with nasal cannulae for the past 3 years. The patient used the O2 some 20 h/day. Spirometry done after the administration of salbutamol showed: FVC 2500 (83%),

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