Association of Primary Care Physician Relationship and Insurance Status With Reduced Rates of Tobacco Smoking

To the Editor:

In order to determine whether an existing primary care provider (PCP) relationship was associated with reduced rates of tobacco smoking, we carried out an anonymous self-reporting survey of all noncritically ill adults seen in the Creighton University Medical Center ED during March and April of 2008. This nonvalidated, institutional review board-approved survey assessed tobacco smoking history, PCP relationship status, and third-party payer status. The survey was completed by 501 of approximately 2,500 patients, for a participation rate of approximately 20% during the study period.

Of patients with a PCP relationship, 26.5% were current tobacco smokers compared with 62.3% of patients without a PCP. A total of 54.8% of patients without insurance reported current smoking compared with 55.4%, 25.9%, and 21.4% of Medicaid, private insurance, and Medicare patients, respectively (Table 1). Although lack of an established PCP relationship and the absence of a third-party payer source were correlated ($r^2 = 0.71, P = .001$), both variables were independent predictors of current tobacco use using multivariate logistic regression modeling (absence of a third-party payer adjusted OR = 1.3 [P = .002] and lack of a PCP relationship adjusted OR = 5.2 [P < .001]). This finding implies that insurance status does not serve as a simple proxy for access to health care by a PCP and that the relationship among tobacco smoking, an established PCP relationship, and the availability of a third-party payer are more nuanced. An interesting observation in this cohort was that a significant portion of the between-group difference in the rate of current tobacco smoking was increased cessation among those with a PCP relationship and/or a third-party payer. Rates of never smokers were consistent across groups when stratified by PCP or insurance status. The exception to this generalization was the Medicaid group, which had a significantly lower percentage of never smokers (16.2%) compared with other groups (34.7%-40.5%). Unmeasured socioeconomic variables may contribute to this finding.

Tobacco smoking cessation rates were drastically improved in the groups with a PCP and/or a third-party payer, and these patients used a more robust complement of cessation modalities. These observations suggest that access to a PCP increases the likelihood of individualized, multimodality prescription medications and that a third-party payer provides financial assistance for access to additional modalities of cessation. The implication that the deleterious effects of tobacco smoking can be mitigated by increasing access to a PCP and ensuring a third-party payer source to subsidize preventative therapies is significant when

Table 1—Comparisons of Primary Care Provider Relationship Status, Tobacco Use, and Smoking Cessation Methods by Insurance Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>None</th>
<th>Private</th>
<th>Medicare</th>
<th>Medicaid</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCP status</td>
<td>211</td>
<td>116</td>
<td>98</td>
<td>74</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>No</td>
<td>174 (82.5)</td>
<td>7 (6.0)</td>
<td>11 (11.2)</td>
<td>15 (20.3)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37 (17.5)</td>
<td>109 (94.0)</td>
<td>87 (88.8)</td>
<td>59 (79.7)</td>
<td></td>
</tr>
<tr>
<td>Tobacco use</td>
<td>210</td>
<td>116</td>
<td>98</td>
<td>74</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Current</td>
<td>115 (54.8)</td>
<td>30 (25.9)</td>
<td>21 (21.4)</td>
<td>41 (55.4)</td>
<td></td>
</tr>
<tr>
<td>Former</td>
<td>15 (7.1)</td>
<td>39 (33.6)</td>
<td>43 (43.9)</td>
<td>21 (28.4)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>50 (38.1)</td>
<td>47 (40.5)</td>
<td>34 (34.7)</td>
<td>12 (16.2)</td>
<td></td>
</tr>
<tr>
<td>Means of cessation</td>
<td>15</td>
<td>39</td>
<td>41</td>
<td>21</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>No help</td>
<td>13 (86.7)</td>
<td>13 (33.3)</td>
<td>18 (43.9)</td>
<td>11 (52.4)</td>
<td></td>
</tr>
<tr>
<td>Prescription medication(s)</td>
<td>0</td>
<td>10 (25.6)</td>
<td>7 (17.1)</td>
<td>4 (19.0)</td>
<td></td>
</tr>
<tr>
<td>Nicotine replacement</td>
<td>2 (13.3)</td>
<td>12 (30.8)</td>
<td>3 (7.3)</td>
<td>2 (9.5)</td>
<td></td>
</tr>
<tr>
<td>Alternative medicine</td>
<td>0</td>
<td>2 (5.1)</td>
<td>4 (9.8)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Counseling</td>
<td>0</td>
<td>2 (5.1)</td>
<td>9 (21.9)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4 (19.0)</td>
<td></td>
</tr>
</tbody>
</table>

PCP = primary care physician.

*Values given are No. or No. (%).
determining how to best deliver cost-effective health care in the United States.

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Thrombocytosis in Patients With Severe Community-Acquired Pneumonia

To the Editor:

In a recent article in CHEST (February 2010), Mirsaeidi and colleagues found that thrombocytosis (platelet count >400,000 cells/µL) at the time of hospital admission was a strong predictive factor of mortality in a population of 500 patients with community-acquired pneumonia (CAP). These results contrast with those of numerous previous studies in which thrombocytopenia was the main platelet disorder associated with worse clinical outcome. 1,2 We believe this conclusion could be explained by the moderate severity of CAP. Among the studied population, only 38% of patients belong to pneumonia severity index risk class 4 and 5, and admission to an ICU concerned only 17.2% of patients. Mortality was relatively low at 10.8% of patients. The authors recommended new studies focusing on the cause of death to determine if an elevated platelet count in patients with CAP is just a marker of the inflammatory response or if it is in part responsible for an increase in mortality. We have recently published a multicenter retrospective study showing, in 822 patients admitted to an ICU for severe CAP, that severe thrombocytopenia (=<50,000 cells/µL) was an independent predictor of mortality. 3 We looked at the impact of thrombocytosis in our patients. The overall ICU mortality rate was 35.4%. Thrombocytosis was present in 70 (5.7%) patients. Among these patients, 24 (34.3%) died. We did not find any difference in outcome compared with patients with thrombocytosis (P=.7). Our patients were more severely ill, with mechanical ventilation required within 12 h following ICU admission in 77.6% of patients and septic shock present in 30.4% of patients. When considering the cause of death according to platelet numbers, we found it was essentially related to sepsis complications in patients with thrombocytopenia (septic refractory shock, n=18; multigain failure, n=17; ARDS, n=11; nosocomial pneumonia, n=8), while in patients with thrombocytosis, the cause of death was mostly related to complications of ICU stay or associated comorbidity (P<.007; COPD, n=3; cerebral vascular ischemia, n=2; cancer, n=2; mesenteric ischemia, n=1; myocardial infarction, n=1) (Table 1).

Thus, we believe that thrombocytopenia remains an important predictor of outcome in patients with severe CAP. In these patients, thrombocytosis is not associated with worse outcome.

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REFERENCES


Response

To the Editor:

We agree with Georges and colleagues that in hospitalized patients requiring ICU admission for severe community-acquired pneumonia (CAP), the presence of severe thrombocytopenia should be considered a risk factor for mortality. A low platelet count is a marker of severe sepsis and may indicate the presence of disseminated intravascular coagulation. In our recent article,