RESEARCH LETTER

The Unique Practice Needs of Academic Facial Plastic and Reconstructive Surgeons

The field of facial plastic and reconstructive surgery (FPRS) is an important part of otolaryngology—head and neck surgery and a certification board–mandated component of resident training. Creating a successful FPRS practice in an academic environment can be challenging, especially if the surgeon desires to provide cosmetic surgical services, because of the unique expenses with regard to practice environment, marketing costs, higher staff needs, and frequently evolving costs of equipment.

Methods | This was a survey study of American otolaryngology department chairpersons who are members of the Association of Academic Departments of Otolaryngology. The survey consisted of 15 questions. The first survey was conducted in 2009, and a second similar survey was administered in 2013.

Results | Responses were obtained from 39 chairpersons in 2009 and from 24 chairpersons in 2013. The Table summarizes the data from both surveys. Some questions in the survey were left blank by the respondents.

Discussion | Advances in the field and in the education of residents depend on a robust community of FPRS surgeons in the academic arena. However, unlike other otolaryngology subspecialties in which a higher level of service is expected at academic institutions, academic FPRS surgeons compete directly with community surgeons for their cosmetic cases. This often translates into a need for specialized staff, upscale space, and expensive equipment. Data from this study show that departments and hospitals provide financial contributions for staff, advertising, and major medical equipment expenses. Surgeons pay for these costs in less than 15% of the surveyed departments. The data herein are heterogeneous because they included departments with full-time academic surgeons and private surgeons.

The above expenses can increase the cost of retaining a FPRS surgeon and potentially decrease the profitability. Nonetheless, 77% of departments in the 2013 survey and 53% of departments in the 2009 survey reported that FPRS surgeons were profitable.

For all surgeons, the option of private practice remains an alternative to an academic career. Departments reported that 25% to 41% of their FPRS faculty are in full-time private practice. Although programs reported that their academic FPRS faculty members perform more reconstructive surgery (60%) than cosmetic surgery (40%), a robust FPRS presence requires both reconstructive and cosmetic cases. In general plastic surgery, the trend has been toward increased nonsurgical procedures, less cosmetic surgery, and more reconstructive surgery (80%-98%) at academic institutions.1-4

<table>
<thead>
<tr>
<th>Variable</th>
<th>2009 Survey</th>
<th>2013 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating departments, No.</td>
<td>39</td>
<td>24</td>
</tr>
<tr>
<td>FPRS surgeons, mean No.</td>
<td>1.4 (Academic only)</td>
<td>2.0 (All)</td>
</tr>
<tr>
<td>Time after fellowship for FPRS surgeons, y</td>
<td>1-30</td>
<td>1-30</td>
</tr>
<tr>
<td>Programs employing full-time academic vs full-time private practice FPRS surgeons, %</td>
<td>85 vs 39</td>
<td>71 vs 21</td>
</tr>
<tr>
<td>FPRS surgeons with incentive component to pay structure, %</td>
<td>88</td>
<td>81</td>
</tr>
<tr>
<td>Departments with profitable FPRS programs, %</td>
<td>53 (6% Break even)</td>
<td>77 (9% Break even)</td>
</tr>
<tr>
<td>Departments with outside space, %</td>
<td>67 (6% Have separate space)</td>
<td>58</td>
</tr>
<tr>
<td>Department/hospital/surgeon pays for outside space, %</td>
<td>41/23/5</td>
<td>67/19/10</td>
</tr>
<tr>
<td>Department/hospital/surgeon pays for FPRS staff, %</td>
<td>48/19/5</td>
<td>67/5/15</td>
</tr>
<tr>
<td>Department/hospital/surgeon pays for expensive equipment, %</td>
<td>32/26/11</td>
<td>50/NA/NA</td>
</tr>
<tr>
<td>Department/hospital/surgeon pays for advertising, %</td>
<td>NA/NA/NA</td>
<td>67/11/17</td>
</tr>
<tr>
<td>FPRS staff have separate space from other otolaryngology staff, %</td>
<td>NA</td>
<td>54</td>
</tr>
<tr>
<td>FPRS surgeons are academically productive, %</td>
<td>NA</td>
<td>67</td>
</tr>
<tr>
<td>Residents are exposed to sufficient FPRS, %</td>
<td>NA</td>
<td>67</td>
</tr>
<tr>
<td>FPRS surgeons practice reconstructive vs cosmetic surgery, %</td>
<td>63 vs 37</td>
<td>59 vs 41</td>
</tr>
<tr>
<td>Concern that FPRS faculty will leave, %</td>
<td>35</td>
<td>33</td>
</tr>
</tbody>
</table>

Abbreviations: FPRS, facial plastic and reconstructive surgery; NA, not available.

* Percentages are calculated as a fraction of programs that participated in the surveys.

Separate space is interpreted as an on-site office but separate from other otolaryngology space.

The numbers do not sum to 100% because of missing survey answers.
The retention of FPRS surgeons is a continuous challenge for otolaryngology departments, with 33% to 35% of respondents reporting concern that FPRS faculty will leave. Reported challenges in the survey include the lure of better private practice compensation, cost of retention because of marketing and staff costs, lack of interest in academic pursuits, and development of strong general plastic surgery departments. In our survey, 81% to 88% of departments have built incentives into their FPRS surgeons' pay structure. Chena et al surveyed general plastic surgery programs and noted a decline in academic faculty over the past 10 years. The most common reasons among departing faculty in that study included inadequate compensation (61%), lack of autonomy (37%), family considerations (36%), and university environment (32%). Eighty percent of departing faculty left for solo or group private practice.

Limitations of our study are the variable and low response rates for the 2 surveys (23% in 2013 and 37% in 2009). In addition, the surveys were anonymous. Therefore, it is unknown if we sampled the same programs. The surveys carry memory and opinion biases. Also, the surveys did not obtain detailed information about the FPRS surgeons themselves. Further research should focus on salary structure, case types, research resources, revenue sources, leadership roles, and administrative responsibilities to better understand the workforce dynamics in this subspecialty.

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Author Contributions: Drs Jumaily and Spiegel had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: Spiegel.

Acquisition, analysis, or interpretation of data: Both authors.

Drafting of the manuscript: Jumaily.

Critical revision of the manuscript for important intellectual content: Both authors.

Statistical analysis: Jumaily.

Obtained funding: Spiegel.

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Study supervision: Spiegel.

Conflict of Interest Disclosures: None reported.


COMMENT & RESPONSE

Factors Contributing to Recovery From Anesthesia and Postoperative Nausea and Vomiting

To the Editor—Anesthesia-and surgery-related independent predictors of postoperative nausea and vomiting (PONV) have been well highlighted by Jones and LaFerriere.1 Nevertheless, some major patient-related independent predictors seem to have been overlooked in their study. Factors contributing to the PONV include, but are not limited to, female sex, not smoking, history of PONV, motion sickness, or migraine, younger age, and duration of anesthesia.2

Propofol is a broadly used agent whose antiemetic properties have been well documented. Jones and LaFerriere1 suggest that propofol, despite having powerful sedative properties similar to ketamine, lacks the advantages of being amnesic and analgesic. Although this is true from the analgesic aspects, at subhypnotic doses, propofol provides sedation and amnesia.3 Generally, at propofol infusion rates greater than 25 to 30 μg/kg/min, patients are amnesic.

Furthermore, patients in the Inhalational Anesthesia (IA) group of the study underwent anesthesia maintenance based on the choice of the anesthesiologists rather than on a single protocol. Anesthesiologists often use nitrous oxide in combination with IA to complete the maintenance of the anesthesia. Both volatile agents and nitrous oxide are known to be emetogenic. Moreover, the emetogenic effects of nitrous oxide and volatile anesthetics are independent; that is, they are additive.4 Also, different types of volatile agents are routinely used for the maintenance of anesthesia. Although there are no differences in PONV among the volatile anesthetics, recovery from anesthesia with desflurane and sevoflurane is more rapid and less influenced by the duration of anesthesia than with isoflurane.5 These confounding factors seem to have been unaccounted for in the study.

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