Controversial themes in liposuction: national opinion survey of members of the Brazilian Society of Plastic Surgery (Update Liposuction Survey)

Temas controversos em Lipoaspiração: pesquisa de opinião nacional de membros da Sociedade Brasileira de Cirurgia Plástica (Update Liposuction Survey / SBCP)

Introduction: Liposuction is the second most commonly performed surgical procedure worldwide. However, many liposuction procedures are controversial. In this context, expert opinion surveys may help elucidate topics lacking consensus. The objective of this survey was to interview plastic surgeons who are members of the Brazilian Society of Plastic Surgery (Sociedade Brasileira de Cirurgia Plástica [SBCP]), the Update Liposuction Survey (ULS/SBCP), to assess their opinions about controversial topics in liposuction. Methods: A link to a questionnaire containing 11 questions involving liposuction (ULS/SBCP) was sent electronically to all SBCP members. The email was sent in three instances and with the provision of incentives to promote a higher response rate. Results: Of the 4,957 contacted plastic surgeons, 917 responded (response rate, 18.5%). The results are being analyzed for publication in full.

■ ABSTRACT

Introduction: Liposuction is the second most commonly performed surgical procedure worldwide. However, many liposuction procedures are controversial. In this context, expert opinion surveys may help elucidate topics lacking consensus. The objective of this survey was to interview plastic surgeons who are members of the Brazilian Society of Plastic Surgery (Sociedade Brasileira de Cirurgia Plástica [SBCP]), the Update Liposuction Survey (ULS/SBCP), to assess their opinions about controversial topics in liposuction. Methods: A link to a questionnaire containing 11 questions involving liposuction (ULS/SBCP) was sent electronically to all SBCP members. The email was sent in three instances and with the provision of incentives to promote a higher response rate. Results: Of the 4,957 contacted plastic surgeons, 917 responded (response rate, 18.5%). The results are being analyzed for publication in full.

Keywords: Lipectomy; Research; Evaluation of results (health care); Surveys and questionnaires; Statistical analysis.
INTRODUCTION

Liposuction is a surgical procedure that reshapes the body contour by removing excess deposits of subcutaneous fat\(^1\).

A review that aimed to obtain more scientific evidence on liposuction found a limited number of studies with high-level evidence, including randomized controlled trials of adequate power, to support the discussion of controversial themes including preoperative evaluation and anesthesia type\(^2\)\(^-\)\(^5\). In fact, plastic surgery and its history have been consolidated by studies with low levels of evidence\(^6\). Randomized clinical trials are scarce due to high cost, high time investment, and greater complexity of the field of surgery\(^7\)\(^,\)^\(^8\).

Expert opinion surveys are a well-established tool for obtaining information about medical conduct\(^9\). Because medical experts play an essential role in the implementation of guidelines, changes in strategies, and use of new technologies, conducting opinion surveys with experts can provide vital data for the development of health policies and scientific research\(^10\)\(^,\)^\(^11\).

METHODS

The present study followed the recommendations of the checklist published by Nolte et al.\(^12\) to conduct and publish opinion surveys. The Update Liposuction Survey of the Sociedade Brasileira de Cirurgia Plástica (ULS/SBCP) was developed to discuss controversial topics in liposuction. The controversial subjects included those in which the level of scientific evidence identified in literature reviews was low and those that generated controversy at scientific meetings promoted by the SBCP. Only closed-type questions were included. The final questionnaire included 11 questions (Annex 1).

All surgeons registered as specialists in the SBCP were consulted electronically between August and November 2016 using the e-mail provided by the SBCP members. The email contained a link from which the member accessed the questionnaire. A “Send” button was located at the end of the questionnaire.

Demographic variables including age, sex, region of the country, and area of expertise in the SBCP were collected using the electronic form. The SBCP Statute classifies SBCP memberships into three categories: Candidate, Associate, and Full. The last two are exclusive to those who obtained a degree of Specialist in Plastic Surgery. The member becomes a Full Member after spending at least 2 years in the Associate Member category and receiving monograph approval by an SBCP-designated committee.

The questionnaire was sent in three different groups. The first batch was delivered to the first 300 members who registered for parallel courses of the 53\(^a\) Brazilian Congress of Plastic Surgery held at the end of 2016 in Fortaleza, Brazil, as an incentive to participate. The questionnaire submission and electronic data collection were executed by a company outsourced by the SBCP (Data Tech, São Paulo, Brazil).
Table 1. Demographic data and membership category of plastic surgeons who answered the questionnaire.

<table>
<thead>
<tr>
<th>Variable</th>
<th>%</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤31 years</td>
<td>1.8</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>32-41 years</td>
<td>40.7</td>
<td>Reference</td>
</tr>
<tr>
<td>42-50 years</td>
<td>24.1</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>&gt;51 years</td>
<td>33.4</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>56.9</td>
<td>Reference</td>
</tr>
<tr>
<td>South</td>
<td>17.8</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Northeast</td>
<td>11.2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Midwest</td>
<td>8.3</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>North</td>
<td>3.0</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Federal District</td>
<td>2.9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>16.2%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Male</td>
<td>83.8%</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Member</td>
<td>40.2%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Associate Member</td>
<td>59.8%</td>
<td></td>
</tr>
</tbody>
</table>

Data analyzed by the equality test of two proportions.

Table 2. Membership duration of Brazilian Society of Plastic Surgery members.

<table>
<thead>
<tr>
<th>Membership duration (years)</th>
<th>Full Member</th>
<th>Associate Member</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18.4 ± 0.9</td>
<td>9.7 ± 0.7</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

ANOVA test.

The statistical analysis was conducted using the two-proportions equality test for categorical variables and the ANOVA test for continuous variables. Values < 5% were considered statistically significant.

RESULTS

A total of 4,957 plastic surgeons affiliated with the SBCP were contacted electronically. Of the 4,957 specialists, 917 answered the questionnaire for a response rate of 18.5%.

The demographic data of the plastic surgeons who answered the questionnaire are shown in Table 1. Most responders were men aged 32-41 years who worked in the Southeast region and were classified as Associate Members of the SBCP. The mean membership durations of the Associate and Full Members who participated in the survey were 9.7 and 18.4 years, respectively (Table 2).

The answers of the plastic surgeons to the 11 formulated questions are being analyzed for later publication in its entirety.

COLLABORATIONS

PVSF Conception, setup and questionnaire application.
ACBB Conception, setup and questionnaire application.
EM Conception, setup and questionnaire application.
LOC Institutional revision.
JCMP Writing the manuscript.
LMF Conception and design of the study; writing the manuscript and critical review of its contents.

REFERENCES


Controversial topics in liposuction


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Annex 1. Questionnaire on controversial topics in liposuction.

<table>
<thead>
<tr>
<th>Question</th>
<th>Choices</th>
</tr>
</thead>
</table>
| 1. The volume you aspirate is: | ( ) The same as the infiltration volume  
( ) Larger than the infiltration volume  
( ) Smaller than the infiltration volume  
( ) I do not perform infiltration |
| 2) Considering Resolution 1.711, which regulates the aspirated volume, what is the maximum volume you would aspirate in routine practice considering the total volume in relation to body weight? | ( ) <5%  
( ) 5%  
( ) 7%  
( ) >7% |
| 3) What type of anesthesia do you use in liposuction in the ventral decubitus position? | ( ) Epidural  
( ) General  
( ) Local and sedation  
( ) Local |
| 4) Do you consider it necessary to have a UTI in the medical center where you perform liposuction? | ( ) Yes  
( ) No |
| 5) Do you perform fat grafting in the gluteal region? | ( ) Yes  
( ) No |
| 6) Do you believe that the combination of liposuction with surgeries of other specialties (e.g., intracavitary, vascular) is safe? | ( ) Yes  
( ) No |
| 7) Do you consider the limit of 4 hours for performing liposuction safe? | ( ) Yes  
( ) No |
| 8) Do you routinely use chemical prophylaxis in liposuction procedures? | ( ) Yes  
( ) No |
| 9) Do you routinely use mechanical prophylaxis in liposuction procedures? | ( ) Yes  
( ) No |
| 10) Do you consider it safe to perform liposuction in patients with a body mass index > 30 kg/m²? | ( ) Yes  
( ) No |
| 11) Do you recommend air travel restrictions to your patients before or after liposuction? | ( ) Yes  
( ) No |