

ISAPS International Survey on Aesthetic/Cosmetic Procedures Performed in 2010 (Revised – January 15, 2013)

Methodology:

Important Note: *this report was revised, as of January 15, 2013. In order to create comparable results between 2011 and 2010, all 2010 figures have been recreated. The changes were based on an adjusted methodology in which outliers (values exceeding three standard deviations from the mean) were set equal to the aggregated mean value. In addition, the American Society of Aesthetic Plastic Surgeons (ASAPS) granted permission for its figures from its 2010 survey to be used with this study. Data from 404 U.S. Plastic Surgeons were added from the ASAPS survey.*

Survey participants completed a two-page, English-based questionnaire that focused on the number of surgical and non-surgical procedures they performed in 2010.

The International Society of Aesthetic Plastic Surgeons (ISAPS) issued an invitation to participate in the study to approximately 20,000 Plastic Surgeons whose contact information is housed in their proprietary database. In addition, a request was made that all National Societies encourage their members/constituents to take part in the survey. Three reminder requests were distributed in order to maximize the response.

The dataset contains experiences of 1,102 plastic surgeons. A total of 698 plastic surgeons participated in the ISAPS survey, and data from 404 U.S. plastic surgeons who participated in the ASAPS survey were added to the dataset.

Final figures have been projected to reflect international statistics and are exclusively based on the estimated number of Plastic Surgeons in each country and the respondent sample. This International Survey is focused entirely on board certified (or national equivalent) Plastic Surgeons.

To aid in tallying the world-wide number of plastic surgeons, representatives from National Societies provided the counts for over 90% of the 33,000 total estimated plastic surgeons. For cases in which the National Society did not provide its country's total, a regression equation was created to estimate the number of plastic surgeons in the country based on its population size and Gross Domestic Product.

With the exception of the United States and Brazil, each country's extrapolation base (its average procedures per plastic surgeon) includes data from all respondents of the country's respective continent. A weighting system was employed that emphasized responses from the particular country.

Caution is urged when comparing against prior or future years, because studies such as this can experience substantial variances within specific procedures. The pool of responding physicians varies from year to year and the sample sizes for specific countries may significantly fluctuate between years.

The *International Survey on Aesthetic/Cosmetic Procedures Performed in 2010* was compiled, tabulated, and analyzed by Industry Insights, Inc. (www.industryinsights.com), an independent research firm based in Columbus, OH. The survey leader was Scott Hackworth, a CPA and research analyst who along with his firm has conducted various forms of research on trends in Aesthetic Plastic Surgery for over 15 years.

Countries by Number of Plastic Surgeons (Top 25)

Rank		Plastic Surgeons	Percent of Total Plastic	
			Surgeons	Percent of Total Procedures
1	U.S.	5,970	18.1%	21.3%
2	Brazil	5,024	15.2%	11.2%
3	China	2,000	6.1%	6.2%
4	India	2,000	6.1%	5.7%
5	Japan	1,831	5.5%	5.7%
6	Mexico	1,518	4.6%	5.4%
7	Italy	1,500	4.5%	4.5%
8	South Korea	1,250	3.8%	3.8%
9	France	953	2.9%	2.8%
10	Colombia	950	2.9%	2.8%
11	Germany	863	2.6%	2.5%
12	Turkey	700	2.1%	2.1%
13	Spain	567	1.7%	1.7%
14	Russia	515	1.6%	1.5%
15	United Kingdom	450	1.4%	1.3%
16	Canada	425	1.3%	1.5%
17	Venezuela	383	1.2%	1.2%
18	Taiwan	350	1.1%	1.1%
19	Argentina	347	1.1%	1.1%
20	Greece	286	0.9%	0.9%
21	Thailand	265	0.8%	0.8%
22	Australia	228	0.7%	0.8%
23	Saudi Arabia	225	0.7%	0.7%
24	Netherlands	215	0.7%	0.6%
25	Romania	200	0.6%	0.6%

Countries by Total Number of Procedures (Top 25)							
Rank		Total Surgical Procedures	% of total surgical procedures	Total Nonsurgical Procedures	% of total nonsurgical procedures	Total Procedures	% of total procedures
1	U.S.	1,090,838	16%	1,918,042	26%	3,008,880	21%
2	Brazil	1,037,958	15%	546,661	7%	1,584,620	11%
3	China	402,560	6%	472,540	6%	875,100	6%
4	Japan	361,568	5%	446,123	6%	807,691	6%
5	India	389,680	6%	413,140	6%	802,820	6%
6	Mexico	297,892	4%	463,233	6%	761,125	5%
7	Italy	320,490	5%	320,190	4%	640,680	5%
8	South Korea	248,413	4%	283,013	4%	531,425	4%
9	France	205,696	3%	193,545	3%	399,240	3%
10	Colombia	238,146	4%	150,072	2%	388,218	3%
11	Germany	184,639	3%	170,796	2%	355,435	3%
12	Turkey	141,239	2%	159,502	2%	300,741	2%
13	Spain	119,637	2%	118,100	2%	237,737	2%
14	Russia	110,627	2%	104,009	1%	214,637	2%
15	Canada	81,273	1%	129,557	2%	210,830	1%
16	United Kingdom	94,851	1%	88,767	1%	183,618	1%
17	Venezuela	96,784	1%	68,032	1%	164,816	1%
18	Argentina	88,572	1%	65,847	1%	154,418	1%
19	Taiwan	70,620	1%	79,751	1%	150,371	1%
20	Greece	61,201	1%	61,441	1%	122,643	1%
21	Australia	48,719	1%	67,912	1%	116,631	1%
22	Thailand	53,469	1%	60,383	1%	113,852	1%
23	Saudi Arabia	45,398	1%	51,269	1%	96,667	1%
24	Netherlands	45,810	1%	42,501	1%	88,311	1%
25	Romania	42,342	1%	40,222	1%	82,564	1%

Number of Procedures and Plastic Surgeons by Continent					
Rank	Continent	Total Procedures	Percent of Total Procedures	Plastic Surgeons	Percent of Total Plastic Surgeons
1	Asia	4,061,748	28.8%	9,512	28.8%
2	North America	4,045,354	28.7%	8,042	24.3%
3	Europe	3,120,640	22.1%	7,469	22.6%
4	South America	2,473,460	17.5%	7,137	21.6%
5	Africa	267,258	1.9%	594	1.8%
6	Oceania	138,390	1.0%	273	0.8%

Number of World-Wide Surgical Procedures Performed by Plastic Surgeons			
Rank	Surgical Procedure	Total	Percent of Total Surgical Procedures
1	Lipoplasty	1,290,702	19.2%
2	Breast augmentation	1,262,779	18.7%
3	Blepharoplasty	792,868	11.8%
4	Abdominoplasty	582,576	8.6%
5	Rhinoplasty	560,854	8.3%
6	Breast reduction (women)	475,787	7.1%
7	Breast lift	452,938	6.7%
8	Facelift	361,318	5.4%
9	Otoplasty	191,223	2.8%
10	Gynecomastia, treatment of (male breast reduction)	174,132	2.6%
11	Lip augmentation (other than injectable materials)	131,447	2.0%
12	Forehead lift	97,436	1.4%
13	Upper arm lift	71,203	1.1%
14	Chin augmentation	62,976	0.9%
15	Buttock augmentation	59,372	0.9%
16	Thigh lift	51,846	0.8%
17	Vaginal rejuvenation	51,044	0.8%
18	Lower body lift	40,987	0.6%
19	Buttock lift	24,154	0.4%
Total Surgical Procedures		6,735,640	

Number of World-Wide Nonsurgical Procedures Performed by Plastic Surgeons			
Rank	Nonsurgical Procedure	Total	Percent of Total Nonsurgical Procedures
1	Botulinum Toxin Type A (Botox Dysport)	2,858,738	38.8%
2	Hyaluronic Acid	1,670,650	22.7%
3	Laser hair removal	667,005	9.0%
4	Autologous fat injections [■]	474,372	6.4%
5	IPL Laser Treatment	393,485	5.3%
6	Microdermabrasion	352,701	4.8%
7	Chemical peel	231,723	3.1%
8	Laser Skin Resurfacing	183,225	2.5%
9	Noninvasive Tightening	165,732	2.2%
10	Calcium Hydroxylapatite	142,686	1.9%
11	Laser-Assisted Lipoplasty	90,377	1.2%
12	Sclerotherapy	73,729	1.0%
13	Dermabrasion	66,788	0.9%
Total Nonsurgical Procedures		7,371,211	

■ Though some may consider this a surgical procedure, it is classified as a nonsurgical procedure in this study since its indications are approximately the same as filler.

Countries Performing Most Popular Surgical Procedures			
Rank	Country	Number of Procedures	Percentage of Total
Lipoplasty			
1	Brazil	218,042	16.9%
2	U.S.	208,831	16.2%
3	India	83,700	6.5%
4	China	79,840	6.2%
5	Japan	70,237	5.4%
Breast Augmentation			
1	U.S.	275,038	21.8%
2	Brazil	173,328	13.7%
3	Mexico	68,978	5.5%
4	Italy	66,765	5.3%
5	China	54,700	4.3%
Blepharoplasty			
1	U.S.	114,146	14.4%
2	Brazil	110,679	14.0%
3	China	51,780	6.5%
4	Japan	48,265	6.1%
5	India	46,320	5.8%
Abdominoplasty			
1	U.S.	111,818	19.2%
2	Brazil	101,987	17.5%
3	India	33,240	5.7%
4	China	32,760	5.6%
5	Mexico	29,647	5.1%
Rhinoplasty			
1	Brazil	66,970	11.9%
2	China	57,640	10.3%
3	India	54,580	9.7%
4	Japan	51,671	9.2%
5	U.S.	39,104	7.0%

Countries Performing Most Popular Nonsurgical Procedures			
Rank	Country	Number of Procedures	Percentage of Total
Botulinum Toxin Type A (Botox Dysport)			
1	U.S.	807,263	28.2%
2	Brazil	203,974	7.1%
3	Mexico	196,217	6.9%
4	China	163,380	5.7%
5	Japan	146,150	5.1%
Hyaluronic Acid			
1	U.S.	409,363	24.5%
2	China	100,420	6.0%
3	Italy	96,765	5.8%
4	Mexico	96,666	5.8%
5	Japan	93,674	5.6%
Laser Hair Removal			
1	U.S.	180,772	27.1%
2	Brazil	57,927	8.7%
3	Japan	54,436	8.2%
4	China	52,520	7.9%
5	India	47,620	7.1%
Autologous Fat Injections[■]			
1	Brazil	61,142	12.9%
2	U.S.	40,715	8.6%
3	China	36,700	7.7%
4	Japan	34,588	7.3%
5	India	34,020	7.2%
IPL Laser Treatment			
1	U.S.	102,565	26.1%
2	Brazil	39,690	10.1%
3	Japan	30,248	7.7%
4	China	28,720	7.3%
5	India	27,240	6.9%
<p>■ Though some may consider this a surgical procedure, it is classified as a nonsurgical procedure in this study since its indications are approximately the same as filler.</p>			

Most Common Procedures By Country	
	Number of Procedures Performed
United States of America	
Surgical Procedures	
Breast augmentation	275,038
Lipoplasty	208,831
Blepharoplasty	114,146
Abdominoplasty	111,818
Breast lift	92,834
Nonsurgical Procedures	
Botulinum Toxin Type A (Botox Dysport)	807,263
Hyaluronic Acid	409,363
Laser hair removal	180,772
Microdermabrasion	144,713
IPL Laser Treatment	102,565
Brazil	
Surgical Procedures	
Lipoplasty	218,042
Breast augmentation	173,328
Blepharoplasty	110,679
Abdominoplasty	101,987
Breast reduction (women)	78,374
Nonsurgical Procedures	
Botulinum Toxin Type A (Botox Dysport)	203,974
Hyaluronic Acid	89,879
Autologous fat injections [■]	61,142
Laser hair removal	57,927
IPL Laser Treatment	39,690
China	
Surgical Procedures	
Lipoplasty	79,840
Rhinoplasty	57,640
Breast augmentation	54,700
Blepharoplasty	51,780
Abdominoplasty	32,760
Nonsurgical Procedures	
Botulinum Toxin Type A (Botox Dysport)	163,380
Hyaluronic Acid	100,420
Laser hair removal	52,520
Autologous fat injections [■]	36,700
IPL Laser Treatment	28,720
<p>[■] Though some may consider this a surgical procedure, it is classified as a nonsurgical procedure in this study since its indications are approximately the same as filler.</p>	

Most Common Procedures By Country (continued)	
	Number of Procedures Performed
Japan	
Surgical Procedures	
Lipoplasty	70,237
Rhinoplasty	51,671
Breast augmentation	49,474
Blepharoplasty	48,265
Abdominoplasty	29,076
Nonsurgical Procedures	
Botulinum Toxin Type A (Botox Dysport)	146,150
Hyaluronic Acid	93,674
Laser hair removal	54,436
Autologous fat injections [■]	34,588
IPL Laser Treatment	30,248
India	
Surgical Procedures	
Lipoplasty	83,700
Rhinoplasty	54,580
Breast augmentation	50,600
Blepharoplasty	46,320
Abdominoplasty	33,240
Nonsurgical Procedures	
Botulinum Toxin Type A (Botox Dysport)	137,160
Hyaluronic Acid	83,640
Laser hair removal	47,620
Autologous fat injections [■]	34,020
IPL Laser Treatment	27,240
<p>■ Though some may consider this a surgical procedure, it is classified as a nonsurgical procedure in this study since its indications are approximately the same as filler.</p>	

Total Procedures for Top 25 Countries

	1	2	3	4	5	6	7	8	9	10	11	12	
	World-Wide												
	Totals	U.S.	Brazil	China	Japan	India	Mexico	Italy	South Korea	France	Colombia	Germany	Turkey
NUMBER OF PLASTIC SURGEONS IN COUNTRY (2010)	33,027	5,970	5,024	2,000	1,831	2,000	1,518	1,500	1,250	953	950	863	700
Surgical Procedures													
Abdominoplasty	582,576	111,818	101,987	32,760	29,076	33,240	29,647	21,735	20,300	14,505	20,644	12,738	11,599
Blepharoplasty	792,868	114,146	110,679	51,780	48,265	46,320	30,648	41,535	32,125	27,027	23,152	24,397	18,018
Breast augmentation	1,262,779	275,038	173,328	54,700	49,474	50,600	68,978	66,765	34,025	42,504	45,562	37,653	19,348
Breast lift	452,938	92,834	75,008	18,940	16,864	17,780	24,258	23,295	11,638	14,676	17,281	13,221	6,699
Breast reduction (women)	475,787	84,834	78,374	24,240	21,386	23,780	21,814	22,500	14,913	14,571	16,378	13,575	8,582
Buttock augmentation	59,372	5,612	18,589	3,100	2,783	2,860	2,657	1,230	1,950	677	4,978	595	1,099
Buttock lift	24,154	3,403	2,964	1,660	1,483	1,620	1,017	990	1,025	639	1,083	699	588
Chin augmentation	62,976	6,507	6,531	6,080	5,292	5,500	2,702	2,205	3,600	1,439	3,078	1,286	2,051
Facelift	361,318	69,789	60,288	18,400	17,376	16,960	18,246	16,500	11,375	10,931	11,391	9,812	6,503
Forehead lift	97,436	20,716	9,043	6,280	5,951	5,460	5,632	3,720	3,888	2,545	4,228	2,330	2,198
Gynecomastia, treatment of (male breast reduction)	174,132	15,582	27,331	12,960	11,316	14,060	4,842	9,465	8,000	5,861	4,684	5,428	4,557
Lip augmentation (other than injectable materials)	131,447	6,627	23,362	9,220	8,386	8,980	3,173	7,800	5,763	4,860	5,016	4,436	3,276
Lipoplasty	1,290,702	208,831	218,042	79,840	70,237	83,700	58,018	54,195	49,050	34,079	48,745	30,861	27,965
Lower body lift	40,987	5,910	6,481	2,060	1,813	2,000	1,913	2,145	1,275	1,353	1,644	1,338	735
Otoplasty	191,223	8,298	33,158	12,200	10,785	11,460	3,522	13,620	7,575	8,434	6,555	7,681	4,319
Rhinoplasty	560,854	39,104	66,970	57,640	51,671	54,580	14,284	23,265	35,350	15,448	17,575	13,135	19,922
Thigh lift	51,846	7,522	6,682	3,120	2,747	3,040	2,186	2,925	1,925	1,858	1,644	1,571	1,113
Upper arm lift	71,203	11,940	8,842	4,100	3,644	4,160	3,446	3,795	2,538	2,449	2,204	2,201	1,456
Vaginal rejuvenation	51,044	2,328	10,299	3,480	3,021	3,580	911	2,805	2,100	1,839	2,309	1,683	1,211
Total Surgical Procedures	6,735,640	1,090,838	1,037,958	402,560	361,568	389,680	297,892	320,490	248,413	205,696	238,146	184,639	141,239
Nonsurgical Procedures													
Injectables													
Autologous fat [■]	474,372	40,715	61,142	36,700	34,588	34,020	14,649	27,450	23,463	17,002	17,338	14,775	12,733
Botulinum Toxin Type A (Botox Dysport)	2,858,738	807,263	203,974	163,380	146,150	137,160	196,217	128,850	97,238	78,079	50,749	70,568	55,076
Calcium Hydroxylapatite	142,686	65,670	452	4,900	4,248	4,180	13,875	7,785	3,663	3,764	865	3,348	1,715
Hyaluronic Acid	1,670,650	409,363	89,879	100,420	93,674	83,640	96,666	96,765	59,838	57,142	26,505	50,201	33,607
Facial Rejuvenation													
Chemical peel	231,723	57,969	26,627	14,540	14,941	14,380	13,890	7,410	9,038	5,079	5,282	4,039	5,159
Dermabrasion	66,788	5,851	4,170	7,180	6,573	7,180	2,247	2,970	4,363	1,916	1,454	1,761	2,499
IPL Laser Treatment	393,485	102,565	39,690	28,720	30,248	27,240	24,501	8,655	17,538	6,099	10,678	4,643	9,709
Laser Skin Resurfacing	183,225	49,372	21,653	11,800	12,085	11,480	10,793	6,420	7,175	3,945	3,373	3,538	4,130
Microdermabrasion	352,701	144,713	19,192	19,640	18,804	19,020	32,683	5,925	12,100	3,917	6,660	3,417	6,965
Noninvasive Tightening	165,732	29,134	9,194	14,960	15,820	12,560	9,488	6,225	8,713	3,717	5,596	3,254	5,019
Other													
Laser-Assisted Lipoplasty	90,377	5,254	10,349	13,920	10,089	11,120	3,203	1,605	6,800	848	3,705	742	3,850
Laser hair removal	667,005	180,772	57,927	52,520	54,436	47,620	40,728	14,610	30,700	9,120	17,575	7,965	17,668
Sclerotherapy	73,729	19,403	2,412	3,860	4,468	3,540	4,296	5,520	2,388	2,916	295	2,546	1,372
Total Nonsurgical Procedures	7,371,211	1,918,042	546,661	472,540	446,123	413,140	463,233	320,190	283,013	193,545	150,072	170,796	159,502
Total Procedures	14,106,852	3,008,880	1,584,620	875,100	807,691	802,820	761,125	640,680	531,425	399,240	388,218	355,435	300,741

Whereas this study focused exclusively on board-certified Plastic Surgeons, the complete survey conducted by the American Society of Aesthetic Plastic Surgery included board-certified Plastic Surgeons as well as board-certified Dermatologists and board-certified Otolaryngologists (ears, nose and throat specialists).

[■] Though some may consider this a surgical procedure, it is classified as a nonsurgical procedure in this study since its indications are approximately the same as filler.

Total Procedures for Top 25 Countries (continued)

	13	14	15	16	17	18	19	20	21	22	23	24	25
	Spain	Russia	Canada	United Kingdom	Venezuela	Argentina	Taiwan	Greece	Australia	Thailand	Saudi Arabia	Netherlands	Romania
NUMBER OF PLASTIC SURGEONS IN COUNTRY (2010)	567	515	425	450	383	347	350	286	228	265	225	215	200
Surgical Procedures													
Abdominoplasty	8,329	7,684	8,198	6,602	8,196	7,339	5,800	4,267	4,824	4,391	3,728	3,143	2,930
Blepharoplasty	15,661	14,873	8,475	12,551	9,226	8,550	9,009	8,042	6,810	6,821	5,792	6,153	5,582
Breast augmentation	25,016	22,758	19,227	19,611	18,327	16,888	9,674	12,544	9,649	7,325	6,219	9,443	8,756
Breast lift	8,567	7,746	6,617	6,795	6,733	6,114	3,350	4,379	2,250	2,536	2,153	3,242	3,038
Breast reduction (women)	8,562	7,684	6,201	6,867	6,611	6,086	4,291	4,367	5,105	3,249	2,759	3,257	3,020
Buttock augmentation	420	371	591	315	1,942	1,690	550	212	59	416	353	157	142
Buttock lift	380	350	264	320	479	420	294	203	221	223	189	148	140
Chin augmentation	805	767	616	621	1,164	1,166	1,026	438	736	776	659	307	282
Facelift	6,175	5,959	5,011	5,027	5,109	4,730	3,252	3,218	2,141	2,462	2,090	2,526	2,194
Forehead lift	1,446	1,478	1,517	1,184	1,536	1,343	1,099	712	1,015	832	707	553	506
Gynecomastia, treatment of (male breast reduction)	3,436	3,126	1,356	2,813	2,133	1,877	2,279	1,816	1,316	1,725	1,465	1,307	1,230
Lip augmentation (other than injectable materials)	2,965	2,760	740	2,223	2,363	2,120	1,638	1,421	559	1,240	1,053	1,097	1,106
Lipoplasty	19,862	18,236	15,831	15,494	20,157	18,391	13,983	10,250	5,515	10,587	8,989	7,648	6,952
Lower body lift	805	742	476	671	693	670	368	412	588	278	236	305	284
Otoplasty	4,995	4,630	888	4,001	2,750	2,571	2,160	2,594	1,810	1,635	1,388	1,916	1,794
Rhinoplasty	8,760	8,240	3,553	6,930	6,844	6,381	9,961	4,490	4,375	7,542	6,404	3,259	3,144
Thigh lift	1,009	942	582	824	693	635	557	532	508	421	358	393	366
Upper arm lift	1,366	1,257	914	1,125	931	802	728	709	803	551	468	533	488
Vaginal rejuvenation	1,077	1,025	217	882	896	798	606	595	433	458	389	421	388
Total Surgical Procedures	119,637	110,627	81,273	94,851	96,784	88,572	70,620	61,201	48,719	53,469	45,398	45,810	42,342
Nonsurgical Procedures													
Injectables													
Autologous fat [■]	9,514	8,879	3,727	7,619	6,856	5,889	6,367	4,882	1,288	4,820	4,093	3,558	3,418
Botulinum Toxin Type A (Botox Dysport)	48,206	42,163	54,740	36,063	23,072	21,382	27,538	24,599	33,751	20,850	17,703	17,495	16,296
Calcium Hydroxylapatite	2,591	2,045	4,042	1,778	326	455	858	1,110	52	649	551	886	790
Hyaluronic Acid	33,306	30,900	27,336	25,889	12,030	12,492	16,804	17,549	18,748	12,723	10,802	12,418	11,880
Facial Rejuvenation													
Chemical peel	3,170	2,503	3,791	2,120	2,363	2,054	2,580	1,639	1,794	1,953	1,658	1,028	972
Dermabrasion	1,242	1,035	523	896	655	600	1,250	686	347	946	803	434	404
IPL Laser Treatment	3,737	3,157	6,957	2,669	5,075	5,240	4,855	1,865	7,223	3,676	3,121	1,210	1,140
Laser Skin Resurfacing	2,376	2,148	3,094	1,872	1,616	1,572	2,065	1,381	456	1,564	1,328	847	800
Microdermabrasion	2,319	2,132	9,257	1,818	3,340	3,442	3,483	1,484	148	2,637	2,239	877	826
Noninvasive Tightening	2,189	1,849	2,393	1,688	2,738	2,786	2,510	1,247	337	1,900	1,613	776	732
Other													
Laser-Assisted Lipoplasty	573	464	718	401	1,371	1,315	1,925	280	0	1,458	1,238	194	216
Laser hair removal	6,968	5,042	11,760	4,572	8,468	8,515	8,834	3,632	3,678	6,689	5,679	2,109	2,118
Sclerotherapy	1,911	1,694	1,220	1,386	123	104	686	1,087	89	519	441	669	630
Total Nonsurgical Procedures	118,100	104,009	129,557	88,767	68,032	65,847	79,751	61,441	67,912	60,383	51,269	42,501	40,222
Total Procedures	237,737	214,637	210,830	183,618	164,816	154,418	150,371	122,643	116,631	113,852	96,667	88,311	82,564

[■] Though some may consider this a surgical procedure, it is classified as a nonsurgical procedure in this study since its indications are approximately the same as filler.