Asian Outcomes of Primary Breast Augmentation in 162 Consecutive Cases by a Single Surgeon

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Background: In 162 Asian patients, primary breast augmentation was performed by a single surgeon during 5 years. The purpose of this study evaluates Asian outcomes in primary breast augmentation using single antibiotic breast irrigation by a single surgeon’s practice and examines the comparison of Asian and Western outcomes in primary breast augmentation.

Methods: A retrospective chart review was performed to examine a total of 162 patients who received the same brand of implants for primary breast augmentation under sedative anesthesia (propofol infusion) in a single surgeon’s practice. Asian patients’ demographics, preoperative and postoperative measurements, surgical technique (single antibiotic breast irrigation), implant type, size, texture, soft tissue coverage, implant placement, incision approach, complications, and incidence of reoperation were documented.

Results: This study presents data for 162 primary breast augmentation who received a total of 324 implants. The mean length of follow-up for all patients was 25.1 months (range, 6–60 months). The difference between Tebbetts and Adams’ reoperation proportion ($\rho_0 = 0.028$) and this article’s reoperation proportion ($\rho_0 = 0.0185$) is not statistically significant ($P$ value = 0.3707). Reoperation rate and complications are not related with implant type, implant placement, body mass index, and incision approach.

Conclusions: By comparison, the reoperation rates between Asian and Western patients are equal due to adequate preoperative evaluation and surgical procedure. The differences are found somewhat in the average measurements of age, body mass index, and implant size. The technique of the use of blunt dissection with fingers under tumescent infiltration and single antibiotics irrigation provides an alternative way to surgeons for breast augmentation. (Plast Reconstr Surg Glob Open 2015;3:e537; doi: 10.1097/GOX.0000000000000518; Published online 20 October 2015.)

The use of breast implants is associated with a number of complications, including hematoma, seroma, infection, altered nipple sensation, asymmetry, deflation, rippling, and capsular contracture. Until the early 2000s, capsular contracture was a significant postoperative complication and cause of reoperation. The best and most controlled available data come from the implant manufacturers’ premarket approval prospective trials, with reoperation rates of 9% for primary augmentation and up to 30% for breast reconstruction patients in the Mentor’s saline trial (2001), 9% for augmentation and 25% for reconstruction patients in the Inamed’s saline trial (2001), and 8–9% for the augmentation subgroup in Inamed’s and Mentor’s silicon gel implant premarket approval trial (2003 and 2005, respectively).

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But Tebbetts\textsuperscript{6} reported 0% reoperation rate in 50 consecutive patients followed for 3 years. He described a comprehensive process for managing the implant patient that allowed him to achieve this impressive outcome.\textsuperscript{7} Adams et al\textsuperscript{5} reported the clinical experience including more than 300 augmentation with an overall reoperation rate of 2.8%. Heden et al\textsuperscript{8} reported their experience with 163 patients undergoing breast augmentation with shaped gel implants. Complications were low, with ruptures reported in 1.7% of patients and capsular contracture occurring in 5.3% of implants.

Multiple studies in a large scale recently have shown both complication rates and reoperation rates. Huang et al\textsuperscript{9} have reported the results that capsular contracture occurred in 73 patients (4.3%) and required reoperation in 58 (3.4%) of a total of 1682 breast augmentations. Codner at al\textsuperscript{10} have published a total of 812 breast augmentations with the capsular contracture of 8.2% and the reoperation rate of 14.2%. Somogyi et al\textsuperscript{7} have reported 1539 consecutive cases in primary breast augmentation with total complication and reoperation rates of 6.8% and 7.7%, respectively.

There are multiple factors that can affect the complication and reoperation rates in breast augmentation. They are patients’ demographics, preoperative measurements, surgical technique (antibiotic breast irrigation), and implant characteristics—including implant type, size, and surface; soft tissue coverage; implant placement; and incision approach.\textsuperscript{7,11–14}

In Asia, breast augmentation is actually one of the most common procedures increasing in plastic surgery. The purpose of this study evaluates Asian outcomes in primary breast augmentation using single antibiotic breast irrigation by a single surgeon’s practice and examines the comparison between Asian and Western outcomes in primary breast augmentation.

| Variable       | No. of Patients (%) |
|----------------|---------------------|
| No. of patients| 162                 |
| Age            |                     |
| Under 29 years | 64 (39.51)          |
| 30–39 years    | 57 (35.19)          |
| 40–49 years    | 30 (18.52)          |
| Over 50 years  | 11 (6.79)           |
| BMI            |                     |
| <18.5          | 39 (24.38)          |
| ≥18.5          | 121 (75.63)         |

BMI, body mass index
Incisions are closed with interrupted or running 4-0 Vicryl in the superficial fascia. Skin is closed with 4-0 Vicryl deep subdermal suture and 5-0 polydioxanone sutures subcuticular suture. The patients take rest in the recovery room for 4–6 hours and are discharged with drains and patient-controlled analgesia. The drains and patient-controlled analgesia are withdrawn the next day (See video, Supplemental Digital Content 1, which demonstrates the surgical technique for transaxillary subpectoral breast augmentation with 286-mL, smooth type, Natrelle. This video is available in the “Related Videos” section of the Full-Text article on PRSGO.com or available at http://links.lww.com/PRSGO/A140).

Statistical Analysis

Statistical analyses were performed using SAS 9.3 (SAS institute, Cary, N.C.). Continuous variables are expressed as mean and standard deviation (SD). Categorical variables are expressed as frequencies and proportions. To find significant difference between variables and body mass index (BMI), t tests are used for continuous variables and chi-square tests are used for categorical variables.

The Z-test for equality of given proportion (Tebbetts and Adams’s reoperation proportion, ρ1 = 0.028) is used to find significant difference between Tebbetts and Adams’s reoperation proportion and this article’s reoperation proportion (ρ0 = 0.0185) after confirming the significant difference between Tebbetts and Adams’s reoperation proportion and reoperation proportion in total patients according to high 5 system.14 Also chi-square tests of independence are used to find significant relationship between categorical variables (implant type, implant placement, BMI, and incision approach) and reoperation, simultaneously with finding significant relationship between categorical variables and complications. P value <0.05 was considered statistically significant in all analyses.

RESULTS

This study presents data for 162 primary breast augmentations either alone (n = 152; 93.82%) or in conjunction with mastopexy (n = 9; 5.56%) and inverted nipple correction (n = 1; 0.62%), for a total of 324 implants. Mean patient age was 33.98 years (range, 21–53 years) in the augmentation group; 41 years (range, 28–61 years) in the augmentation-mastopexy group. The mean length of follow-up for all patients was 25.1 months (range, 6–60 months) (Table 3). The rate of follow-up at 5 years for all patients was 92%.

The patients received smooth (n = 286; 88.27%) and textured (n = 38; 11.73%) silicon gel implants. Average implant size was 253.98mL (range, 150–304mL). Pocket location was distributed with subglandular pocket in 73.5% (n = 119), subpectoral pocket in 20.4% (n = 33), and dual-plane 1 pocket in 6.1% (n = 10).16 Patients had implants placed through transaxillary incision (n = 87; 55.77%) with the remainder being placed through inframammary fold (n = 69; 44.23%) (Table 4).

The complications in a total of 3 patients (1.85%) were summarized as follows: Baker grade II contracture was 1 case (0.62%), Baker grade III contracture was 1 case (0.62%), and rippling was 1 case (0.62%). A total of 3 patients (1.85%) underwent reoperation: 2 cases for correction of Baker grade II/III contracture (1.23%), 1 case for size exchange (0.62%) (Table 5).

In analysis with BMI in Asian patients, group I has patients with BMI < 18.5 and group II has patients with BMI ≥ 18.5. There are statistically significant variables: age (group I: group II = 30.55:34.97), body weight (group I: group II = 45.95:53.29), anterior pull skin stretch (group I: group II = 2.1:2.61), breast base width (group I: group II = 11.45:12.55), right breast height (group I: group II = 11.53:11.67), clavicle to nipple distance (group I: group II = 17.6:19.85), lateral pinch (group I: group II = 1.72:1.99), medial pinch (group I: group II = 2.16:2.92), middle line to nipple (group I: group II = 8.6:9.7), nipple to inframammary fold distance (group I: group II = 5.0:5.33), sternal notch to nipple distance (group I: group II = 18.14:20.19), upper pole pinch (group I: group II = 2.49:2.97), and propofol volume (group I: group II = 146.23:170.32) (Table 6). The relationship of BMI groups and inframammary fold is statistically significant (P value = 0.0220); lowering inframammary fold in group I is more frequent than in group II (Table 7).

In total patients according to high 5 system,14 the number of patients of not over estimated volume is 101 and the number of reoperation patients is 2. The difference between Tebbetts and Adams’s reoperation proportion (ρ1 = 0.028) and reoperation proportion is not statistically significant (P value = 0.5545) in the high 5 system of not over estimated volume. The number of patients of implant base width ≤ breast base width is 121 and the number of reoperation patients is 2. The difference between Tebbetts and Adams’s reoperation proportion (ρ0 = 0.028) and

| Implant Type             | Manufacturer/Style | No. of Implants (%) |
|-------------------------|-------------------|---------------------|
| Smooth round gel        | Allergan Style 15 | 286 (88.27)         |
| Textured round gel      | Allergan Style 115| 38 (11.73)          |

Table 2. Implant Categories with Corresponding Manufacturer and Style Number
reoperation proportion is not statistically significant ($P_{\text{value}} = 0.3223$) in the high 5 system of comparing with implant base width and breast base width. The number of patients of optimal implant placement is 102 and the number of reoperation patients is 3. The difference between Tebbetts and Adams’s reoperation proportion ($\rho = 0.028$) and reoperation proportion is not statistically significant ($P_{\text{value}} = 0.9327$) in the high 5 system of optimal implant placement (Table 8). In total patients according to high

### Table 3. Descriptive Analysis of Continuous Variables

| Variable                          | Average (SD) | No. of Patients | Variable                          | Average (SD) | No. of Patients |
|-----------------------------------|--------------|-----------------|-----------------------------------|--------------|-----------------|
| Age                               | 33.98 (8.7)  | 161             | BMI                               | 19.71 (1.97) | 160             |
| Body weight (kg)                  | 51.94 (8.33) | 162             | Follow-up period (months)         | 25.1 (10.85) | 162             |
| Height (cm)                       | 161.57 (5.62)| 160             | Lateral pinch (cm)                | 1.94 (0.73)  | 298*            |
| OP Time (minutes)                 | 110.87 (51.78)| 121             | Lateral pinch left                | 1.98 (0.71)  | 149             |
| APSS (cm)                         | 2.49 (0.79)  | 280*            | Lateral pinch right               | 1.9 (0.75)   | 149             |
| APSS left                         | 2.53 (0.8)   | 140             | Middle line to nipple (cm)        | 8.97 (1.08)  | 296*            |
| APSS right                        | 2.44 (0.78)  | 140             | Middle line to nipple left        | 9.01 (1.15)  | 148             |
| Areolar diameter (horizontal) (cm)| 2.98 (0.91)  | 286*            | Middle line to nipple right       | 8.93 (1.01)  | 148             |
| Areolar diameter (horizontal) left| 3 (0.92)     | 143             | Medial pinch (cm)                 | 2.74 (2.51)  | 298*            |
| Areolar diameter (horizontal) right| 2.97 (0.9) | 143             | Medial pinch left                 | 2.89 (3.38)  | 149             |
| Areolar diameter (vertical) (cm)  | 2.86 (0.87)  | 286*            | Medial pinch right                | 2.6 (1.08)   | 149             |
| Areolar diameter (vertical) left  | 2.88 (0.87)  | 143             | Nipple to IMF (N-IMF) (cm)        | 5.27 (1.23)  | 298*            |
| Areolar diameter (vertical) right | 2.85 (0.87)  | 143             | Nipple to IMF (N-IMF) left        | 5.35 (1.25)  | 149             |
| BBW (cm)                          | 12.3 (1.5)   | 298*            | Nipple to IMF (N-IMF) right       | 5.19 (1.2)   | 149             |
| BBW left                          | 12.19 (1.2)  | 149             | Nipple to IMF (stretched) (cm)    | 7.13 (1.34)  | 298*            |
| BBW right                         | 12.41 (1.75) | 149             | Nipple to IMF (stretched) left    | 7.19 (1.38)  | 149             |
| BH (cm)                           | 13.02 (12.41)| 298             | Nipple to IMF (stretched) right   | 7.07 (1.3)   | 149             |
| BH left                           | 12.33 (8.24) | 149*            | SN-N (cm)                         | 19.72 (2.33) | 296*            |
| BH right                          | 13.71 (15.51)| 149             | SN-N left                         | 19.81 (2.56) | 148             |
| C_N (cm)                          | 19.34 (2.57) | 298*            | SN-N right                        | 19.64 (2.29) | 148             |
| C_N left                          | 19.42 (2.5)  | 149             | Upper pole pinch (cm)             | 2.86 (0.84)  | 298*            |
| C_N right                         | 19.25 (2.64) | 149             | Upper pole pinch left             | 2.91 (0.86)  | 149             |
| Drain (mL)                        | 59.83 (43.18)| 90              | Upper pole pinch right            | 2.81 (0.82)  | 149             |
| Drain left                        | 62.76 (50.5) | 45              | Tumescent volume (mL)             | 261.51 (27.63)| 252*           |
| Drain right                       | 56.91 (34.7) | 45              | Tumescent volume left             | 261.51 (27.69)| 126             |
| Implant size (mL)                 | 253.98 (23.11)| 322*           | Tumescent volume right            | 261.51 (27.69)| 126             |
| Implant size left                 | 253.89 (22.76)| 161          | Propofol volume (mL)              | 164.43 (53.69)| 121             |
| Implant size right                | 254.08 (23.51)| 161          | *Total sum of right and left cases. |

APSS, anterior pull skin stretch; BBW, breast base width; BH, breast height; BMI, body mass index; C_N, clavicle to nipple; IMF, inferior mammary fold; OP, operation; SN-N, sternal notch to nipple.

### Table 4. Descriptive Analysis of Categorical Variables

| Variable                          | Group                      | No. of Patients (%) | Total No. | Variable                          | Group                      | No. of Patients (%) | Total No. |
|-----------------------------------|----------------------------|---------------------|-----------|-----------------------------------|----------------------------|---------------------|-----------|
| Reoperation                       | Yes                        | 3 (1.85)            | 162       | Asymmetry chest wall              | Asymmetry                  | 58 (39.19)          | 162       |
| Complication                      | Yes                        | 3 (1.85)            | 162       | Asymmetry breast                  | Asymmetry                  | 62 (41.89)          | 162       |
| Sex                               | Female                     | 162 (100)           | 162       | Asymmetry chest wall              | Asymmetry                  | 58 (39.19)          | 162       |
| Sex                               | Male                       | 0 (0)               | 0         | Asymmetry breast                  | Asymmetry                  | 0 (0)               | 0         |
| BMI                               | <18.5                      | 39 (24.38)          | 160       | Asymmetry breast                  | Asymmetry                  | 62 (41.89)          | 162       |
| BMI                               | ≥18.5                      | 121 (75.63)         | 160       | Asymmetry chest wall              | Asymmetry                  | 58 (39.19)          | 162       |
| Implant placement                 | Subglandular               | 119 (73.46)         | 162       | Nipple-level discrepancy          | Yes                       | 87 (59.18)          | 147       |
| Implant placement                 | Subpectoral                | 43 (26.54)          | 162       | Nipple-level discrepancy          | No                        | 60 (40.82)          | 147       |
| Implant type                       | Smooth                     | 286 (88.27)*        | 324*      | IM-level discrepancy              | Yes                       | 78 (53.06)          | 147       |
| Implant type                       | Textured                   | 38 (11.73)*         | 113       | Surgery type                      | Augmentation               | 162 (100)           | 162       |
| Implant type left                  | Smooth                     | 145 (88.27)         | 162       | Additional surgeries              | Inverted nipple correction | 1 (0.62)            | 1         |
| Implant type left                  | Textured                   | 19 (11.73)          | 113       | Mastopexy                         | Keep                      | 9 (5.56)            | 147       |
| Breast shape                       | Conical                    | 11 (7.48)           | 147       | Inframammary fold                 | Lower                     | 76 (51.7)           | 156       |
| Breast shape                       | Narrow                     | 2 (1.36)            | 147       | Incision approach                 | Axillary                   | 87 (55.77)          | 156       |
| Breast shape                       | Round                      | 124 (84.35)         | 147       | Inframammary                      | Tubular                   | 69 (44.23)          |           |
| Breast shape                       | Wide                       | 1 (0.68)            | 147       | Inframammary                      | Tubular                   | 69 (44.23)          |           |

*Total sum of right and left cases. BMI, body mass index; IMF, inferior mammary fold.

In nipple- and IMF-level discrepancy, Yes is more than 1.5 cm and No is less than 1.49 cm in the difference between right and left.

*Total sum of right and left cases. BMI, body mass index; IMF, inferior mammary fold.
5 system, Tebbetts and Adams’s reoperation proportion ($\rho_0 = 0.028$) and reoperation proportion are equal.

The difference between Tebbetts and Adams’s reoperation proportion ($\rho_0 = 0.028$) and this article’s reoperation proportion ($\rho_0 = 0.0185$) are equal.

When examining the relationship of variables and reoperation, implant type and reoperation are statistically independent ($P$ value = 0.3675). Implant placement and reoperation are statistically independent ($P$ value = 0.2933). BMI and reoperation are statistically independent ($P$ value = 0.7152). Incision approach and reoperation are statistically independent ($P$ value = 0.4295) (Table 9). Also checking the relationship of variables and complications, implant type and complications are statistically independent ($P$ value = 0.3675). Implant placement and complications are statistically independent ($P$ value = 0.2933). BMI and complications are statistically independent ($P$ value = 0.0850). Incision approach and complications are statistically independent ($P$ value = 0.4295) (Table 10). Reoperation rate and complications are not related with categorical variables (implant type, implant placement, BMI, and incision approach).

**DISCUSSION**

This study analyzed the comparison between Asian and Western outcomes and the features of Asian patients in primary breast augmentation.

**Table 5. Absolute Rates of Recorded Complications and Reasons for Reoperation**

| Variable                        | No. of Patients (%) |
|---------------------------------|---------------------|
| Types of complications          |                     |
| No                              | 159 (98.15)         |
| Baker grade II                   | 1 (0.62)            |
| III                             | 1 (0.62)            |
| Rippling                        | 1 (0.62)            |
| Total                           | 3 (1.85)            |
| Reoperation reason              |                     |
| No                              | 159 (98.15)         |
| Baker grade II                   | 1 (0.62)            |
| III                             | 1 (0.62)            |
| Size exchange                   | 1 (0.62)            |
| Total                           | 3 (1.85%)           |

**Table 6. Analysis of Continuous Variables between Group I (BMI < 18.5) and Group II (BMI ≥ 18.5)**

| Variable                        | t   | Statistic | P  Value |
|---------------------------------|-----|-----------|----------|
| Age                             | 3.28| 0.0015    | BMI      |
| Body weight                     | 9.92| <0001     | Follow-up period |
| Height                          | 1.47| 0.1432    | APSS     |
| OP time (minutes)               | 0.86| 0.3963    | APSS left |
| APSS                            | 6.75| <0001     | APSS right |
| APS left                        | 4.9 | <0001     | Areolar diameter (horizontal) |
| APS right                       | 4.62| <0001     | Areolar diameter (horizontal) left |
| Areolar diameter (horizontal)   | 0.65| 0.5141    | Areolar diameter (horizontal) right |
| Areolar diameter (vertical)     | 0.4 | 0.6901    | Areolar diameter (vertical) left |
| Areolar diameter (vertical)     | 0.52| 0.602     | Areolar diameter (vertical) right |
| BBW left                        | 6.4 | <0001     | BMI      |
| BBW right                       | 2.95| 0.0053    | BH       |
| BH                              | 0.3 | 0.7638    | SN-N     |
| BH left                         | 0.87| 0.3895    | C_N      |
| BH right                        | 2.08| 0.0394    | C_N left |
| C_N left                        | 6.26| <0001     | C_N right |
| C_N right                       | 4.91| <0001     | Drain    |
| Drain                           | 0.18| 0.8557    | Drain left |
| Drain left                      | 0.47| 0.6406    | Implant base diameter |
| Implant base diameter           | 0.24| 0.811     | Implant size left |
| Implant size                    | 0.19| 0.8525    | Implant size right |
| Implant size left               | 0.3 | 0.7624    |          |
| Implant size right              | 0.24| 0.811     |          |

*P* value < 0.05 is considered statistically significant in variables written in bold type.

APSS, anterior pull skin stretch; BBW, breast base width; BH, breast height; BMI, body mass index; C_N, clavicle to nipple; IMF, inferior mammary fold; OP, operation; SN-N, sternal notch to nipple.
When this study shows the complications (1.85%) and reoperation (1.85%), Tebbetts and Adams’s reoperation proportion ($\rho_0 = 0.028$) and this article’s reoperation proportion ($\rho = 0.0185$) are equal. Implant type, size, and incision approach were chosen in the same condition of preoperative evaluation (high 5 system). The number of patients are almost similar (this study $n = 162$, Tebbetts and Adams’s study $n = 172$). The differences are surgical technique and antibiotics irrigation. This study shows blunt dissection with fingers under tumescent infiltration and single antibiotics irrigation, but Tebbetts and Adams’s study shows only electrocautery dissection and triple antibiotics irrigation. The author can make the hypothesis that blunt dissection with fingers under tumescent infiltration has the same effect as electrocautery dissection and that single antibiotics irrigation is enough for the prevention of capsular contracture. For supporting the hypothesis, a large number of patients for broad research would be needed.

Reoperation rate and complications are not related with categorical variables (implant type, implant placement, BMI, and incision approach). The author thinks that the result may be caused by small number of patients, low rate of reoperation, and complications due to adequate preoperative evaluation and surgical procedure.

The average measurements and features of Asian patients in primary breast augmentation are as in the following: average age is 33.98 years (compared with 35 years in Westerners), average BMI is 19.71 (compared with 21.1 in Westerners), average implant size is 253.98 mL (compared with 311 mL in Westerners), lowering inframammary fold in group I (BMI < 18.5) is more frequent than

| Variable                        | Chi-square Statistic | $P$ Value | Variable                        | Chi-square Statistic | $P$ Value |
|---------------------------------|----------------------|-----------|---------------------------------|----------------------|-----------|
| Reoperation                     | 0.1351               | 0.7152    | Asymmetry chest wall            | 2.0318               | 0.1540    |
| Complication                    | 2.9665               | 0.0856    | Asymmetry breast                | 1.7773               | 0.1825    |
| Implant placement               | 0.8768               | 0.3491    | Nipple-level discrepancy        | 0.9906               | 0.6094    |
| Implant type                    | 1.7243               | 0.1891    | IMF-level discrepancy           | 1.0011               | 0.6062    |
| Implant type right              | 0.8621               | 0.3531    | Inframammary fold              | 5.2442               | 0.0220    |
| Implant type left               | 0.8621               | 0.3531    | Incision approach              | 1.0944               | 0.2955    |
| Breast shape                    | 5.6270               | 0.2288    |                                 |                      |           |

*$P$ value < 0.05 is considered statistically significant in variables written in bold type.

| Variable                        | No. of Patients (%) / Total | No. of Reoperation Patients (%) | $P$ Value of Z-test ($\rho_0 = 0.028$) |
|---------------------------------|-----------------------------|---------------------------------|--------------------------------------|
| Not over estimated volume       | 101 (74.26) / 136           | 2 (1.98)                        | 0.5543                               |
| IBW ≤ BBW                       | 121 (81.21) / 149           | 2 (1.65)                        | 0.3223                               |
| Optimal implant placement       | G 94 (76.42) / 123          | 3 (2.94)                        | 0.9327                               |
|                                 | P 8 (53.33) / 15            |                                 |                                      |

BBW, breast base width; G, subglandular; IBW, implant base width; P, subpectoral.

### Table 7. Analysis of Categorical Variables between BMI < 18.5 Group and BMI ≥ 18.5 Group

### Table 8. The Z-test for Equality of Given Proportion ($\rho_0 = 0.028$) in Total Patients According to High 5 System

### Table 9. Result of Chi-square Test for Independence between Variables and Reoperation

*Total sum of right and left cases*
in group II (BMI ≥ 18.5) because group I was inclined to choose larger volume (average implant size in group I = 253.15 mL) than nipple to infra-mammary distance.

The strength of this study is that it represents the review of the differences and resemblances between Asian and Western outcomes in primary breast augmentation and the average measurements of Asian patients in primary breast augmentation. Also the author proposes the possibility of applying blunt dissection with fingers under tumescent infiltration and single antibiotics irrigation.

The weakness of the study is that it represents small series of Asian patients with 5-year follow-up period, 2 types of gel implant from a single manufacturer. These data cannot be used to draw conclusions about other implant types because the study methodology and parameters addressed differ from other studies. Additional weakness of the study is that it represents Western outcomes by another surgeon with different surgical skills of his own and different brand of implants from different manufacturer.

CONCLUSIONS

There is no report about the differences between Asian and Western outcomes in primary breast augmentation. By comparison, the reoperation rates between Asian and Western patients are equal due to adequate preoperative evaluation and surgical procedure. The differences are found somewhat in the average measurements of age, BMI, and implant size. Reoperation rate and complications are not related with implant type, implant placement, BMI, and incision approach. The technique of the use of blunt dissection with fingers under tumescent infiltration and single antibiotics irrigation provides an alternative way to surgeons for breast augmentation.

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