

Surgical Management of Textured Breast Implants: Assessing Risk and Analyzing Patient-Reported Outcomes

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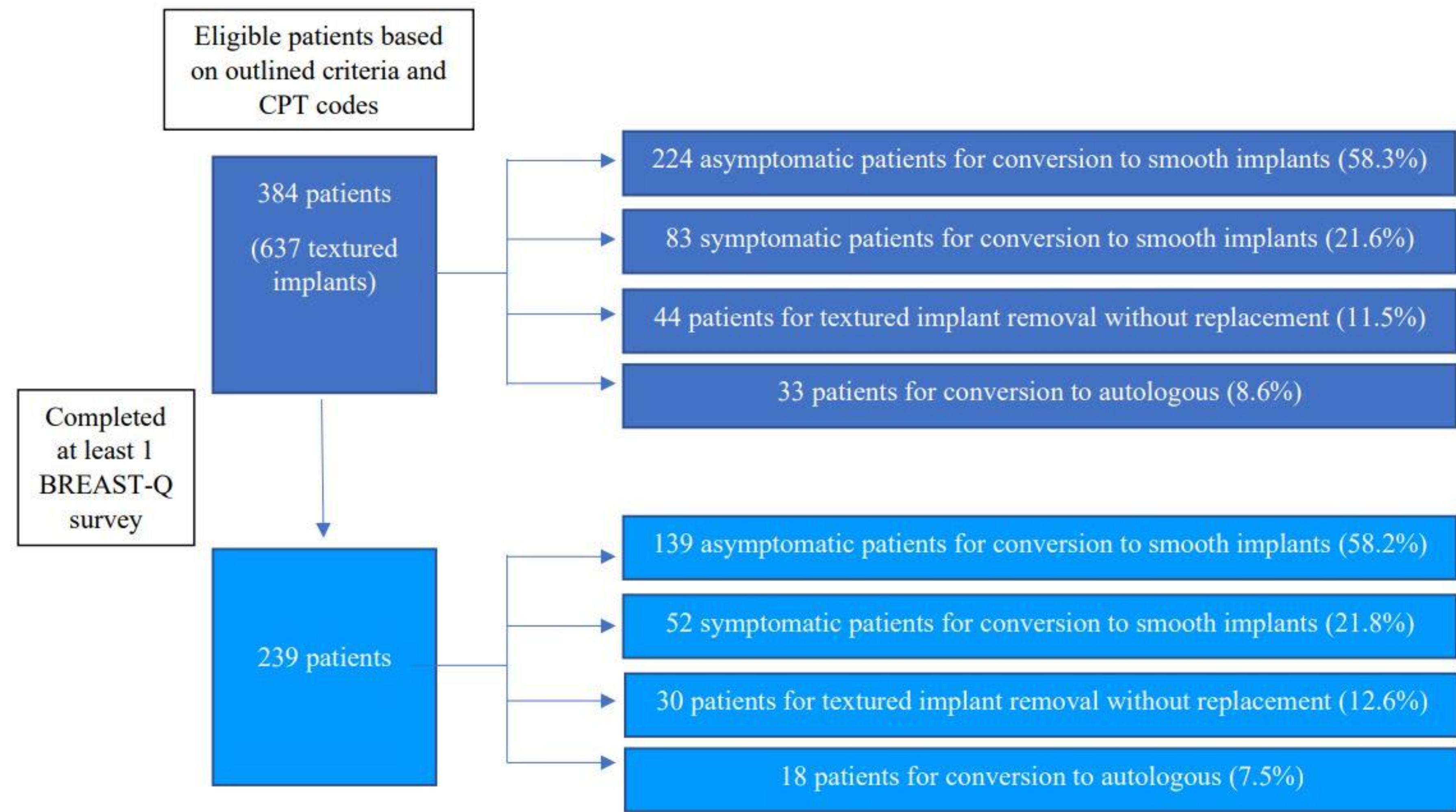
Background

- Textured breast implants have been linked to breast implant-associated large-cell lymphoma (BIA-ALCL), resulting in the July 2019 FDA recall of Allergan BIOCELL textured implants.
- Although the FDA does not recommend removal in patients who present without symptoms, there is an overall lack of data guiding the management of patients with textured implants in place.
- Our group previously identified 3 surgical management options for patients with textured implants: 1) removal without further reconstruction 2) removal with exchange to smooth implants 3) removal with subsequent autologous reconstruction
- We aimed to compare clinical, and patients reported outcomes (PROs) between patients undergoing different surgical interventions for their textured implants.

Methodology

- Retrospective review of patients with a history of implant-based breast reconstruction from 2018-2021, identifying those with textured devices.
- Primary outcomes: complications and PROs
- Secondary outcome: the effect of capsulectomy extent on complication rates
- Patients who underwent replacement of textured implants with smooth implants were separately analyzed as symptomatic and asymptomatic to address the fact that some patients may have desired surgery for risk reduction while others may have desired surgery for symptom reduction.

Figure 1. Patient Groups



Results

- Removal without replacement had higher rates of seroma than all other patient groups.
- The extent of capsulectomy was not associated with rates of complications.
- Preoperatively, textured-to-autologous patients had significantly lower average scores for Satisfaction with Breasts and Psychosocial Well-Being.
- Compared to their preoperative scores, textured-to-autologous and textured-to-smooth patients had significantly higher Satisfaction with Breasts scores starting at 3 months and sustaining for 1+ years.
- Compared to their preoperative scores textured-to-autologous patients had significantly higher scores starting at 6 months and sustaining for 1+ years.
- At 1+ years, all other patient groups had significantly higher Physical Well-Being of the Chest scores than the group who removed their implants and did not replace them.
- Implant removal without replacement was identified as an independent predictor of lower scores on Physical Well-Being of the Chest and Psychosocial Well-Being.

Table 2. BREAST-Q Scores for Satisfaction with Breasts

Time of Survey	Score				p
	Replacement with Smooth Implants Asymptomatic	Replacement with Smooth Implants Symptomatic	Removal without Replacement	Replacement with Autologous Reconstruction	
Preoperative Mean ± SD	<u>n = 137</u> 55.6 ± 20.7	<u>n = 50</u> 51.2 ± 22.6	<u>n = 28</u> 49.3 ± 22.8	<u>n = 18</u> 37.2 ± 15.1	0.003
3 mo post-operative Mean ± SD Preop to postop change (p)	<u>n = 55</u> 63.5 ± 24.9 +7.9 (0.007)	<u>n = 24</u> 66.6 ± 30.5 +15.4 (0.001)		<u>n = 9</u> 60 ± 15.5 +22.8 (0.003)	0.616
6 mo post-operative Mean ± SD Preop to postop change (p)	<u>n = 55</u> 62.5 ± 19.2 +6.9 (0.031)	<u>n = 21</u> 57.1 ± 26.0 +5.9 (0.184)		<u>n = 14</u> 72.1 ± 17.6 +34.9 (<0.001)	0.155
≥1 yr post-operative Mean ± SD Preop to postop change (p)	<u>n = 117</u> 63.8 ± 21.6 +8.2 (<0.001)	<u>n = 40</u> 65.4 ± 19.6 +14.2 (0.004)		<u>n = 17</u> 63 ± 20.4 +25.8 (<0.001)	0.133

Conclusions

- Replacement of textured implants with smooth implants and replacement of textured implants by autologous reconstruction can result in significant and sustained increases in satisfaction with breasts and are associated with relatively low rates of complications.
- Partial and complete capsulectomy are safe for patients undergoing removal of textured implants.

References

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