

COMMON COMPLICATIONS

What are the most common local complications and adverse outcomes with breast implants?

The most common local complications and adverse outcomes associated with breast implants are capsular contracture, reoperation, implant removal, and rupture or deflation of the implant.

Capsular Contracture

After your breast implant surgery, your breasts will begin to heal and adapt to the presence of the breast implants. A regular part of this process is that the breast tissue typically forms an internal scar immediately surrounding the implant. In many cases, this tissue forms a capsule that helps hold the implant in place. However, in some women, the scar tissue around the implant tightens and squeezes the implant. When scar tissue squeezes an implant, it is called capsular contracture.

Capsular contracture causes the breast to feel abnormally firm and can cause pain. There is a scale for describing the severity of the contracture. It is called the Baker Grading Scale. The grades are:

Grade I	Grade II	Grade III	Grade IV
Contracture is observed, but the breast feels and looks normal (it is soft)	The breast is a little firm, but looks normal	The breast is firm and looks abnormal	The breast is hard, painful, and looks abnormal

Capsular contracture may be more common if you have had a breast infection, hematoma (a solid swelling of clotted blood within the tissue) or seroma (collection of fluid that builds up under the surface of your skin). The chances of having contracture typically increase the longer you have your implants. Capsular contracture is a risk factor for implant rupture, and it is one of the most common reasons for reoperation. It also seems that women who have additional surgery to replace their implants (revision surgery) are more likely to have capsular contracture than women having their first augmentation or reconstruction.

Reoperation

It is likely that you will need additional surgery (a reoperation) at some point after your first breast implant surgery, either to correct a problem with or replace your breast implants.

Patients may decide to change the size or type of their breast implants, requiring additional surgery. Problems such as rupture, capsular contracture, asymmetry (lack of proportion of shape, size and/or position between the two breasts), hypertrophic scarring (irregular, raised scar), infection, and shifting can require additional surgery. Some changes to your breast(s) after having breast implants are irreversible (cannot be changed or fixed). These may include dimpling, puckering, wrinkling, or the appearance that the breast is empty or deflated.

Implant Removal

Your breast implants may be removed (with or without being replaced) at some point during the course of your life. You and



your doctor may decide to remove an implant or implants because of a complication or to improve the cosmetic result. Because these are not lifetime devices, the longer you have your breast implants, the more likely it will be for you to have them removed for any reason, either because of dissatisfaction, an unacceptable cosmetic result, or a complication such as severe capsular contracture.

Rupture

Breast implants are considered to have ruptured when the implant shell develops a tear or hole. Implants could rupture any time after your implant surgery, but the longer the implants are in place, the higher the possibility that the implants will rupture or the gel will leak. Breast implants may rupture or leak because of any of these reasons:

- Damage by surgical instruments at the time of implantation or during any subsequent surgical procedure,
- Stress to the implant during implant surgery that weakens it,
- Folding or wrinkling of the implant shell,
- Excessive force to the chest (for example, during closed capsulotomy, which is a procedure that should not be used),
- Trauma (like being in a car accident),
- Compression during a mammogram,
- Severe capsular contracture, or
- Normal use over time.

Additional information, the most common local complications, and adverse outcomes with breast implants can be found at: www.fda.gov/downloads/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/BreastImplants/UCM259894.pdf

BREAST-IMPLANT ASSOCIATED ANAPLASTIC LARGE CELL LYMPHOMA (BIA-ALCL)

What is BIA-ALCL?

Breast Implant-Associated Anaplastic Large Cell Lymphoma (BIA- ALCL) is a rare type of lymphoma that has been found in women with breast implants. [1-5] It usually appears as a swelling of the breast caused by fluid surrounding the implant, usually occurring at least one year after surgery. [6] Other late onset symptoms may include pain, lumps, swelling, or asymmetry. [5] The recommended treatment is the removal of the breast implant and the surrounding tissue; treatment has been successful when caught early. [6.7]

How often does BIA-ALCL occur?

Health authorities globally state the incidence of BIA-ALCL is rare. $^{(1-5)}$ In March of 2017, the U.S. Food and Drug Administration (FDA) reported they had received a total of 359 medical device reports (MDRs) of BIA-ALCL. $^{(5)}$ The FDA had previously estimated that there were 5-10 million women with breast implants worldwide. $^{(1.2)}$

The FDA has noted that "BIA-ALCL occurs more frequently following implantation of breast implants with textured surfaces." (5)

CHOICE OF IMPLANTS

Why should I consider textured implants?

Textured implants have certain advantages over smooth implants. The newest generation of shaped breast implants are textured to reduce movement of the implant. Textured implants have other benefits in reducing complications, which may require reoperation, that occur much more frequently than BIA-ALCL, including capsular contracture. (14,15) Selection of the most appropriate implant for you should be a conversation between you and your doctor.

Are Mentor implants safe?

MENTOR® Breast Implants are backed by substantial clinical data demonstrating safety and effectiveness in both augmentation and reconstruction, including 10-year clinical trials. $^{(14-19)}$ The evidence continues to support the safe and effective use of MENTOR® Breast Implants in breast surgery.

Mentor continues to work with industry groups, physician scientists and health authorities globally to better understand the associated risks and causes of BIA-ALCL. As patient safety has been and always will be Mentor's first priority, Mentor continues to closely monitor reports of and information about BIA-ALCL.

Where can I find additional resources about BIA-ALCL?

The U.S. Food and Drug Administration (FDA), French: National Security Agency of Medicines and Health Products (ANSM), Therapeutic Goods Administration (TGA), and Medicines & Healthcare products Regulatory Agency (MHRA)The American Society of Plastic Surgeons (ASPS), the American Society for Aesthetic Plastic Surgery (ASAPS), The Plastic Surgery Foundation (PSF) and the International Society of Aesthetic and Plastic Surgery (ISAPS) all provide up to date resources about the risks and benefits of breast implant surgery as well as information about BIA-ALCL. (1-5.8-13)

What should I do if I already have breast implants?

The FDA does not recommend changes to your routine medical care and follow-up, nor does it recommend the removal of implants. $^{(1,2,5)}$ Health authorities state that BIA-ALCL is very rare; it has occurred in only a very small number of the millions of women who have breast implants. $^{(1-5)}$

The FDA notes that symptoms of BIA-ALCL are typically late onset, meaning they occur at least one year after your surgery. Symptoms typically include pain, lumps, swelling, or asymmetry. If you experience any of these symptoms, contact your health care provider promptly to schedule an appointment.⁽⁵⁾

Although not specific to BIA-ALCL, the FDA recommends that you follow standard medical recommendations including:^(2,5)

- Monitor your breast implants. If you notice any changes, contact your health care provider promptly to schedule an appointment. For more information on self breast exams, visit MedlinePlus: Breast Self Exam at: https://medlineplus. gov/ency/article/001993.htm.
- Get routine mammography screening.
- If you have silicone gel-filled breast implants, get periodic magnetic resonance imaging (MRI) to detect ruptures as recommended by your health care provider. The FDA-approved product labeling for silicone gel-filled breast implants states that the first MRI should occur three years after implant surgery and every two years thereafter.

References

- Anaplastic Large Cell Lymphoma (ALCL) In Women with Breast Implants: Preliminary FDA
 Findings and Analyses: Center for Devices and Radiological Health, U.S. Food and Drug
 Administration; January 2011 [cited 2017 26 February]. Available from: https://http://
 www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/
 BreastImplants/ucm239996.htm.
- Anaplastic large cell lymphoma (ALCL). US Food and Drug Administration; 20 January 2016 [cited 2017 26 February]. Available from: https://http://www.fda.gov/MedicalDevices/ ProductsandMedicalProcedures/ImplantsandProsthetics/BreastImplants/ucm239995.htm.
- 3. Lymphome Anaplasique à Grandes Cellules associé aux implants mammaries (LAGC-AIM): Point sur les investigations en cours- Point d'Information.: L'Agence nationale de sécruité du médicament et des produits de santé (ANSM). 06 July 2016 [cited 2016 06 July]. Available from: http://ansm.sante.fr/S-informer/Points-d-information-Points-d-information/Lymphome-Anaplasique-a-Grandes-Cellules-associe-aux-implants-mammaires-LAGC-AIM-Point-sur-les-investigations-en-cours-Point-d-Information.
- 4. Breast Implants: Expert Advisory Panel Advice on Association with Anaplastic Large Cell Lymphoma.: Austraian Government Department of Health Therapeutic Goods Administration.; 20 December 2016 [cited 2017 26 February]. Available from: https://http://www.tga.gov.au/ alert/breast-implants.
- Breast Implant-Associated Anaplastic Large Cell Lymphoma (BIA-ALCL): US Food and Drug Administration; 22 March 2017 [cited 2017 22 March]. Available from: https://http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/ BreastImplants/ucm239995.htm.
- Clemens MW, Medeiros LJ, Butler CE, Hunt KK, Fanale MA, Horwitz S, et al. Complete Surgical Excision Is Essential for the Management of Patients With Breast Implant-Associated Anaplastic Large-Cell Lymphoma. J Clin Oncol. 2016;34(2):160-8. Epub 2015/12/03. doi: 10.1200/jco.2015.63.3412. PubMed PMID: 26628470; PubMed Central PMCID: PMCPMC4872006 online at http://www.jco.org. Author contributions are found at the end of this article.
- Clemens MW, Horwitz SM. NCCN Consensus Guidelines for the Diagnosis and Management of Breast Implant-Associated Anaplastic Large Cell Lymphoma. Aesthetic surgery journal. 2017. Epub 2017/02/12. doi: 10.1093/asj/sjw259. PubMed PMID: 28184418.

- 8. ASPS/ASAPS Update Breast Implant-Associated Anaplastic Large Cell Lymphoma (BIA-ALCL) Quick Facts and FAQs: THe American Society For Aesthetic Plastic Surgery & American Society of Plastic Surgeons. Available from: http://www.surgery.org/downloads/blasts/BIA-ALCL/.
- Breast implants report cases of anaplastic large cell lymphoma (ALCL): Medicines and Healthcare products Regulatory Agency; 10 July 2014 [cited 2017 26 February]. Available from: https://http://www.gov.uk/drug-device-alerts/medical-device-alert-breast-implants-report-cases-of-anaplastic-large-cell-lymphoma-alcl.
- Information on BIA-ALCL: American Society of Plastic Surgeons; 2017 [cited 2017 26 February]. Available from: https://http://www.plasticsurgery.org/patient-safety/information-on-bia-alcl.
- Joint ASPS & ASAPS Statement on Breast Implant-Associated ALCL 2016 [cited 2017 26 February]. Available from: http://www.surgery.org/downloads/private/joint-asps-asaps-statement-on-breast-implant-associated-alcl.pdf.
- Frequently Asked Questions (FAQ): A Guide to Breast Implant-Associated Anaplastic Large Cell Lymphoma: American Society of Plastic Surgeons and The Plastic Surgery Foundation; 2016 [cited 2017 22 March]. Available from: http://www.thepsf.org/Documents/Clinical/ PROFILE/profile-faq.pdf.
- International Society of Aesthetic Plastic Surgery (ISAPS) 2017. Available from: http:// www.isaps.org.
- MemoryShape Post-Approval Cohort Study (formerly Contour Profile Gel Core Study)
 Final Clinical Study Report. Mentor Worldwide, LLC; 02 June 2015.
- 15. MemoryGel Core Cel Clinical Study Final Report. Mentor Worldwide, LLC; April 2013.
- 16. Mentor Memory Shape Post-Approval Continued Access Study (formerly Contour Profile Gel Continued Access Study), Final Report. October 2014.
- $17.\ Memory Gel\ Breast\ Implant\ Large\ Post\ Approval\ Study\ Re-Op\ Phase\ Annual\ Report.}$ $17\ June\ 2016.$
- 18. Adjunct Study Final Report for Mentor's MemoryGel Silicone Gel-filled Breast Implants. 02 November 2012.
- 19. Mentor MemoryShape CPG Styles Study: A Study of the Safety of the Contour Profile Gel Breast Implants in Subjects who are Undergoing Primary Breast Augmentation, Primary Breast Reconstruction, or Revision, Final Clinical Study Report. October 2015.

Important Safety Information

The MENTOR* Collection of Breast Implants are indicated for breast augmentation in women who are at least 22 years old for MENTOR* MemoryGel* Breast Implants or MENTOR* MemoryShape* Breast Implants, and at least 18 years old for MENTOR* Saline Breast Implants.

Breast implant surgery should not be performed in women:

- With active infection anywhere in their body
- With existing cancer or pre-cancer of their breast who have not received adequate treatment for those conditions
- Who are currently pregnant or nursing

Safety and effectiveness have not been established in patients with autoimmune diseases (for example lupus and scleroderma), a weakened immune system, conditions that interfere with wound healing and blood clotting, or reduced blood supply to breast tissue. Patients with a diagnosis of depression, or other mental health disorders, should wait until resolution or stabilization of these conditions prior to undergoing breast implantation surgery.

There are risks associated with breast implant surgery. You should be aware that breast implants are not lifetime devices and breast implantation may not be a one-time surgery. You may need additional unplanned surgeries on your breasts because of complications or unacceptable cosmetic outcomes. Many of the changes to your breast following implantation are irreversible (cannot be undone) and breast implants may affect your ability to breastfeed, either by reducing or eliminating milk production.

Breast implants are not lifetime devices and breast implantation may not be a one-time surgery. The most common complications with MemoryGel* Implants, MemoryShape* Implants, and Saline-filled Breast Implants include reoperation, capsular contracture, asymmetry, breast pain, implant removal, wrinkling, ptosis, and implant rupture and deflation.

Detailed information regarding the risks and benefits associated with MENTOR® Breast Implants is provided in several educational brochures. For MemoryGel® Implants: Important Information for Augmentation Patients about MENTOR® MemoryGel® Breast Implants. For MemoryShape® Implants: Patient Educational Brochure – Breast Augmentation with MENTOR® MemoryShape® Breast Implants and Quick Facts about Breast Augmentation & Reconstruction with MENTOR® MemoryShape® Breast Implants. For MENTOR® Saline-filled Implants: Saline-Filled Breast Implants: Making an Informed Decision. These brochures are available from your surgeon or visit www.mentorwwllc.com. It is important that you read and understand these brochures when considering MENTOR® Breast Implants.

