

## References (to live on Project Health Website)

1. Wilson, E., Rapues, J., Jin, H., & Raymond, H. F. (2014). The Use and Correlates of Illicit Silicone or “Fillers” in a Population-Based Sample of Transwomen, San Francisco, 2013. *The journal of sexual medicine*, 11(7), 1717-1724.
2. Echo, Anthony, et al. "Surgical management of silicone mastitis: case series and review of the literature." *Aesthetic plastic surgery* 37.4 (2013): 738-745.
3. Schmid, Andreas, et al. "Silicone embolism syndrome: a case report, review of the literature, and comparison with fat embolism syndrome." *CHEST Journal* 127.6 (2005): 2276-2281.
4. Fox LP, Geyer AS, Husain S, Della-Latta P, Grossman ME (2004) Mycobacterium abscessus cellulitis and multifocal abscesses of the breasts in a transsexual from illicit inframammary injection of Silicone. *J Am Acad Dermatology* 50:450–454
5. Agrawal, Nidhi, et al. "Silicone-Induced Granuloma after Injection for Cosmetic Purposes: A Rare Entity of Calcitriol-Mediated Hypercalcemia." *Case reports in medicine* 2013 (2013).
6. Paul, Suchismita, et al. "Granulomatous reaction to liquid injectable silicone for gluteal enhancement: review of management options and success of doxycycline." *Dermatologic therapy* 28.2 (2015): 98-101.
7. Lloret, Pedro, et al. "Successful treatment of granulomatous reactions secondary to injection of esthetic implants." *Dermatologic surgery* 31.4 (2005): 486-490.
8. Arin, Meral J., et al. "Silicone granuloma of the face treated with minocycline." *Journal of the American Academy of Dermatology* 52.2 (2005): S53-S56.
9. Lopiccolo, Matteo C., et al. "Silicone Granulomas After Soft-Tissue Augmentation of the Buttocks: A Case Report and Review of Management." *Dermatologic Surgery* 37.5 (2011): 720-725.
10. Gold, Heidi, et al. "Gluteal silicone injections leading to extensive filler migration with induration and arthralgia." *Dermatology online journal* 21.2 (2015).
11. Pasternack, Fiona R., Lindy P. Fox, and Danielle E. Engler. "Silicone granulomas treated with etanercept." *Archives of dermatology* 141.1 (2005): 13-15.c
12. Rapaport, Marvin J. "Silicone granulomas treated with etanercept." *Archives of dermatology* 141.9 (2005): 1171-1171.
13. Baumann L, Halem M (2003) Lip silicone granulomatous foreign body reaction treated with Aldara (imiquimod 5%). *Dermatol Surg* 29:429–432.
14. Alijotas-Reig, Jaume, Maria Teresa Fernández-Figueras, and Lluís Puig. "Late-onset inflammatory adverse reactions related to soft tissue filler injections." *Clinical reviews in allergy & immunology* 45.1 (2013): 97-108.
15. Redondo P, Del Olmo J, Alberola I. In situ and distant foreign body granulomas caused by silicone. Treatment with allopurinol. *Br J Dermatol*. 2005;152(5):1064–1065.
16. Cho, Suhyun, et al. "Silicone-Induced Foreign Body Reaction of the Face Successfully Treated Using Nonablative 1,550-nm Erbium-Glass and Ablative

- 10,600-nm Carbon Dioxide Fractional Lasers." *Dermatologic Surgery* 38.10 (2012): 1744-1746.
17. Ellis, Lixia Z., Joel L. Cohen, and Whitney High. "Granulomatous reaction to silicone injection." *The Journal of clinical and aesthetic dermatology* 5.7 (2012): 44.
  18. Cárdenas-Camarena, L. (2009). Managing the mammary gland infiltrated with foreign substances: different surgical alternatives. *Annals of plastic surgery*, 62(6), 621-626.

Chronic silicone complications: recurrent cellulitis like reactions +/- SQ nodules, ulceration, LAN, and constitutional sx. This is a chronic granulomatous reaction associated with high levels of TNF- $\alpha$ . May be chronic or relapsing. May be at the site where silicone was initially injected or distant from that site because of migration of silicone.

Steroids most effective, but need to be tapered. Use alternate drugs for maintenance (steroid sparing). TCN antibiotics for their anti-inflammatory rather than antimicrobial effect have been most often reported in the literature. May take months to have effect if used alone. Other treatments reported in the literature include topical imiquimod, TNF- $\alpha$  inhibitors, hydroxychloroquine, allopurinol, high dose antihistamines, and even tacrolimus with cyclosporine for refractory cases.

Surgery may be effective although difficult. However, chronic inflammation should be under control before surgery is attempted to decrease the risk of formation of ulcers, migration, infection, and fistulas.

What is silicone pumping?

What are the complications?

Acutely - infections. Acutely although rare severe silicone syndrome with severe breathing problems that often result in the need to be placed on a machine to breath in the ICU, permanent brain damage. And 1 in 4 people who get acute silicone syndrome will die, even if treated at a hospital.

How can you minimize your risk?

If you get sick, go to the hospital and bring this flyer because on the back there is important information for your doctor.

No adulterants

Wait 2 years

Hibiclens

Smaller doses spaced out

Avoid intravascular injection

If you had a prior reaction, never again