Injectable Liquid Silicone for Cosmetic Procedures: Safety
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Acknowledgments:

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About CADTH: CADTH is an independent, not-for-profit organization responsible for providing Canada’s health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs, medical devices, diagnostics, and procedures in our health care system.

Funding: CADTH receives funding from Canada’s federal, provincial, and territorial governments, with the exception of Quebec.
Research Question

What is the clinical evidence regarding short and long-term adverse events associated with the use of injectable liquid silicone?

Key Findings

One systematic review and two non-randomized studies were identified regarding short and long-term adverse events associated with the use of injectable liquid silicone.

Methods

A limited literature search was conducted on key resources including Ovid Medline, PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or safety data. An additional search for Canadian-related documents was also run without any methodological filters applied. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2008 and April 6, 2018. No date limits were applied to the Canada-only portion of the search. Internet links were provided, where available.

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

| Population | Patients who have undergone cosmetic procedures on any part of the body and who received this treatment in Canada (could be Canadian patients, could be patients who got the injection in Canada) |
| Interventions | Injectable liquid silicone, non-medical grade silicone, liquid silicone, industrial grade silicone, aged silicone, medical grade silicone, pure silicone |
| Comparator | No comparator |
| Outcomes | Safety, adverse events; both immediate (e.g. multi-system organ failure the same day as injection) and long term (e.g. organ failure 20+ years in the future) |
| Study Designs | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies |
Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and non-randomized studies.

One systematic review and two non-randomized studies were identified regarding short and long-term adverse events associated with the use of injectable liquid silicone. No relevant health technology assessments or randomized controlled trials were identified.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses

*Canadian Population Unspecified*


Randomized Controlled Trials
No literature identified.

Non-Randomized Studies

*Canadian Population Unspecified*


Appendix — Further Information

Previous CADTH Reports


Case Studies and Case Series – Non-Canadian Studies


Review Articles

Not Specific to Canada


Additional References

32. FDA warns against use of injectable silicone for body contouring and enhancement: FDA safety communication [Internet]. Silver Spring (MD): U.S. Food and Drug Administration; 2017 [cited 2018 Apr 12]. Available from: https://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm584824.htm


Note: French language