Title: Systematic Review of Autologous Fat Transfer for Breast Augmentation

Agency: ASERNIP-S, Australian Safety and Efficacy Register of New Interventional Procedures - Surgical
PO Box 688, North Adelaide, South Australia 5006, Australia;
tel +61 8 8239 1144, college.asernip@surgeons.org, www.surgeons.org/open/asernip-s.htm

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Aim
To compare the safety and efficacy of autologous fat transfer for breast augmentation and conventional techniques of breast enlargement using saline and cohesive silicone gel implants.

Conclusions and results
No studies comparing fat injection with other techniques for breast augmentation were recovered. Of the 10 fat injection studies retrieved, only 3 were case series, the others being case studies. Only 5 studies were retrieved that reported data on saline implants, although one of these was a comprehensive review of published data. The very small amount of data available for the fat injection technique suggested that somewhere between 20% and 100% of the injected fat had been reabsorbed. Little data was available to assess the procedure’s safety. A comparison with saline implants, for which there was considerably more data, was not possible.

Recommendations
The ASERNIP-S Review Group determined that the evidence base for Autologous Fat Transfer for Breast Augmentation was poor, and consequently safety and efficacy could not be determined. Furthermore, the group recommended that owing to the lack of evidence regarding patient gain from the procedure of Autologous Fat Transfer for Breast Augmentation, coupled with the theoretical dangers of obscuring carcinoma of the female breast, the ASERNIP-S Review Group could not endorse the collection of data within Australia for this procedure.

Methods
Relevant literature on autologous fat transfer for breast augmentation was identified by searching Current Contents from 1993 to 2001 (week 20), MEDLINE from 1980 to 2001 (May week 2), EMBASE from 1980 to 2001 (week 17), HEALTHSTAR from 1975 to 2000 (December), and The Cochrane Library 2001 Issue 2. After the initial literature search, papers were restricted to English if other language papers were not considered superior. Papers detailing randomized controlled trials and controlled clinical trials were included, with case series and case reports also included for the new intervention. Additional published material and other studies were included where relevant.