Mesh-Based Immediate Breast Reconstruction

Complications and long-term results

Breast cancer is the most common form of cancer in women worldwide. In Sweden about one out of ten women are at risk for developing breast cancer in their lifetime. Despite increasing incidence the prognosis has improved, due to better early diagnostics and treatment, and has led to an increased demand for breast reconstruction. There is also a group of women there are at high risk for developing a breast cancer due to heredity and in this group there is indication for a prophylactic mastectomy with immediate reconstruction in many cases.

Breast reconstruction surgery has evolved over the last decades but there is still no gold standard for every patient with the need for an immediate breast reconstruction. Nearly twenty years ago, meshes were introduced to enhance the outcome in breast reconstruction but the evidence for the benefit of such materials is still weak.

The aim of the present thesis was to evaluate the level of evidence for immediate breast reconstruction in combination with biologic and synthetic meshes compared to traditional surgical methods. Other aims were to analyze complications with and without different meshes, patients’ satisfaction with the outcome and quality of life undergoing immediate breast reconstruction.

This thesis reveals that the scientific evidence regarding the benefit of using meshes in immediate breast reconstruction is unclear. The complication levels using meshes are high and the satisfaction with the outcome and Quality of life are not clearly superior to traditional surgical methods.

In summary, further well-designed studies are needed to improve our knowledge of how to perform the optimal immediate breast reconstruction.