BREAST FEEDING AND PROSTHESES

Breast prostheses have been implanted in large numbers for more than forty years and users have ranged from late adolescence to individuals of advanced age. The socio-economic profile of this cohort is tilted towards individuals with an age range of 25-40 and is rapidly dropping as promotion targets an even younger, image conscious population. Fertility and lactation concerns for such a group may not be at the forefront when a decision is made to undergo implantation. However, the issue resurfaces several years post-implantation as pregnancies develop in a significant fraction of users. Nearly all consumer oriented material as well as surgeons' reinforce the view that breast feeding is not only possible but desirable even for implanted patients. Implanted mothers therefore expect to retain their capacity to safely breast feed.

Such an expectation is illogical. Implantation of a foreign object in the breast irreversibly modifies the breast structure. Even with removal of the prosthesis, the structure and physiology of the gland are not restored to their original state. The very act of inserting such an object in the breast has lasting and irreversible consequences, all of which militate strongly against safe breast feeding. The changes greatly increase the probability of complications to the user as the breast engorges and tissue is strained. Concurrent physiologic and chemical changes in the breast area impact adversely on the amount and quality of milk produced by lactating mothers where insertion of a foreign object and extensive surgery has been performed.

The belief that breast feeding is possible and safe for implant users is novel thinking. In the sixties and seventies, breast feeding was not deemed desirable for implant users. Some physicians did not even regard it as possible. Their views were based on clinical, biomechanical, biochemical and physiologic considerations. Prostheses had mechanically damaging features known to modify the breast eventually damaging the vasculature and the lactation apparatus over the long term. The high impurity levels associated with implants, in particular oils similar to what had been used in connection with injected silicone augmentation, were known to impact adversely on lactation. The experience of oil-injected patients produced sufficient information to support the view that prosthetically modified breasts were unsuited for breast feeding.

In the following years, the issue remained dormant and no major investigation was performed. Instead, hearsay and fiction surrounded the issue and it became accepted amongst the lay public and some general practitioners that cosmetically augmented mothers could breast feed without problems. Specialists in surgery of the breast, and in particular plastic surgeons, knew otherwise but the information was not shared.

European publications of the seventies contraindicated breast feeding based on empirical data gathered from users of the previous decade. The advice against breast feeding was more a matter of cosmetic and comfort as opposed to risk to infants. It was reasoned that avoidance of breast feeding would minimize post-lactation ptosis, breast involution and connective tissue distention within the cosmetically modified breast. Microbiological issues were considered but not given prominence but it was recognized that colonization of the implant site and intracapsular mastitis would be factors that could spread to the lactation apparatus with time.

Collapse of the lactation system is a logical expectation from surgical damage incidental to implant insertion and gross contamination of the breast by dispersible reactive debris. Similar results are expected from the introduction of implants that exert continuous pressure on the breast gland and the vasculature. Chronic, uncontrollable fibrosis further complicate the situation. Combination of these factors with recurrent low level infective processes will alter the gland over time and severe discomfort is expected upon engorgement prior to lactation.

Anatomic, biomechanical and physiologic considerations of the prosthetically modified breast clearly demonstrate why breast feeding is impractical and destructive. The use of a retromammary implant eventually causes pressure atrophy of the breast gland and collapse of the ducts which convey fluid to the nipple. This is known within some circles who have noted that there is chronic swelling of the nipple areolar complex in augmented patients. The phenomenon persists for many years until necrotic processes drastically diminish the fluid transport within the anterior of the breast. It is rare when atrophy is not present in surgically augmented breasts after implants have been in situ for 2-4 years. Irrigation within the critical area is reduced and large prominent veins appear in the periphery of the breast implant, usually close to the skin. Compression causes focal ischemia and oxygen depletion. These factors militate towards failure of the milk-producing system.

Upon cessation of breast feeding, the breast returns to its initial augmented volume but tissues and ligaments are stretched and the patient re-encounters ptosis and involution of the gland, further reducing the breast volume. Thus, the cosmetic benefits of the augmentation may be lost and re-do surgery to regain the esthetic effect may be undertaken.

Formal fertility and lactation studies have never been conducted rigorously by opponents or proponents of breast feeding. Only superficial surveys and anecdotal claims of successful breast feeding by individuals who had recently received implants appear in the literature. The work is oriented at reassuring prospective unsophisticated implant candidates as opposed to documenting the impact of breast feeding on existing implant users and infants.

Breast prostheses are not conventional medical products. Throughout the years they have been a heterogeneous mixture of low quality products with high levels of impurities and features which made their users vulnerable to chronic adverse processes. They induce infections that can remain dormant for many years, producing destructive local effects and high quantities of microbiological metabolites. The capsule around the implant does not impede dissemination of prosthetic debris. It only delays release. Capsules deteriorate and remodel with time to eventually release their content. Even popular contracture treatments foster infective complications by releasing entities captive within the intracapsular space thus spreading the effect of colonization to distal parts of the breasts.

Evidence of necrosis and tissue degeneration surrounding implants is found in nearly all users with implant dwell times exceeding three years. This is seen in mammographic studies where large quantities of calcific debris are shown associated with tissue deterioration and fat necrosis. Such effects strongly militate against breast feeding.