



Prospective Study To Evaluate Risk Of Breast Tissue Expander And/Or Implant Contamination And Infection Prevention

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Background:

The breast reconstruction with prosthetic material has evolved with time and can be performed from several stages to single stage. The use of allograft has been increased substantially in recent years. The risk of breast reconstruction infection varies from 1% to 24%. The high rate of infection could be contributed due to two teams at first surgery, allograft, excessive lymph node excision, in office tissue expander inflation, thin flaps and radiation among other factors. The loss of reconstruction takes a great deal of stress to the patient as well as surgical team.

Methods:

patients were selected in two groups according to their risk factors. In one group the cultures were taken in the operating room when the tissue expander was removed, during capsulotomy and or exchange of implant, (as soon as the pocket was opened). and was compared to the group of patients selected without cultures. Both groups risk factors and cultures were studied and if the cultures were positive appropriate antibiotics were administered for salvage of reconstruction.

Results:

various risk factors were identified during the study. The group of patients with culture were treated with appropriate antibiotics and reconstruction was saved. The group without cultures, unfortunately developed clinical infection and were treated accordingly i.e. removal of tissue expanders and /or implants, and treatment of infection.

Conclusions:

In our study, identification of sub-clinical infection with intra-operative cultures has prevented loss of breast reconstruction and avoided full blown clinical infection. It has shown cost effectiveness by preventing additional unplanned surgeries. To evaluate further we recommend that this study should be done in large scale.

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