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THE USE OF ALLODERM VERSUS FLEX HD IN IMPLANT BASED BREAST RECONSTRUCTION

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Purpose: Prosthetic reconstruction using an implant or tissue expander is a common practice in breast reconstruction. Alloplastic material like Alloderm has been frequently used. It allows the surgeon to completely cover the exposed portion of the prosthesis at the lower pole. By supporting the prosthesis in place, it helps to define the shape and contour of the reconstructed breast. It also helps to recreate a well defined inframammary fold and lateral mammary fold. Most importantly, it creates an interface between the prosthesis and the skin flap. All these helps to reconstruct an aesthetically pleasing breast and allows one to complete the reconstruction expeditiously. Alloderm is an allogenic acellular dermal matrix. This product needs to be rehydrated prior to use. Other than Alloderm, another product newly available is FlexHD. Unlike Alloderm which is freeze dried, FlexHD is packaged hydrated in 70% ethanol solution. Hence, it does not require rehydration or rinsing prior to use. The aim of study is to determine whether there is any difference in the postoperative complications between the two products.

Methods: We performed a retropsective review of all implant based reconstruction using either Alloderm or FlexHD from 1st Jan 2008 till 31st Oct 2009. There were a total of 28 patients (42 breasts) in the Alloderm arm and 47 patients (69 breasts) in the Flex HD arm. Primary endpoints are hematoma, infection and explantation rates for both methods.

Results: The mean follow-up was 11.6 months. During this time, there is no significant difference in the infection and explantation rates between the two groups. There were no cases of hematoma noted.

Conclusion: This study demonstrated no significant difference in the complication rates between the two products. The infection rate was 10%. The explantation rate with Alloderm was 4.7% and 7.2% with Flex HD, but this is not statistically significant. We think that allogenic acellular tissue matrix remains a useful armamentarium for breast reconstruction.