Lecture 4: Non-absorbable synthetic mesh tiloop

Maurizio Nava (ITA)Background: Conservative mastectomies (NSM-SSM-SRM) with immediate breast reconstruction (IBR) are considered to be partof the oncoplastic surgical procedures of breast cancer surgical treatment. Methods which combine oncological safety with a good aesthetic outcome. According to the international literature conservative mastectomies are oncologically safe and suitable for invasive breast cancer less than 5cm in diameter, with a multi- centric tumour, a ductal carcinoma in situ (DCIS) or prophylactic, risk-reducing mastectomies. The surgical procedures must be done carefully and following the last paper published in order to be sure to remove the all glandular tissue, particularly below the NAC.

The surgical procedures for immediate breast reconstruction are related to the patient wishes and breast characteristics. The breast size and shape are the first drive in order to choose the right reconstructive procedure.

In the last decade in Europe a new kind of device has been intro- duced to allow an immediate reconstruction with permanent implants in selected patients. These new devices called "meshes" are made in different material: acellular dermal matrix (ADM), nets of prolene covered with titanium, reabsorbible nets and more.

Until now there are no clinical studies showing statisticaldata on these new devices and we have only retrospective analy-

ABSTRACTS

sis as expert opinion, low evidence based medicine. We started recently a clinical randomised study with a control arm group, double blind, using an ADM derived from porcine derma.

Our experience started with a previous clinical investigation carried out in three centres in Italy with a prolene covered with titanium. The inclusion criteria was: small-medium breast, SSM or NACSM, dual plane with mesh, permanent implant.

Clinical investigation data: We enrolled in a prospective clinical investigation 125 patients (139 meshes) by using Titanium cov- ered net. The data showed that the patient selection is funda-mental and few are really candidate to this surgical approach. The skin incision must be close to the lateral edge of the pectoralis major muscle to avoid major complication if skin sufferance is present. Major complications: 2 implants lost, 5 wounds dehis- cence, 1 total and 3 partial

NAC necrosis.

In order to have any conclusion we need the results of clinical randomised trials, but these prospective clinical investigations can offer encouraging results and indications.

My personal opinion on these so called “meshes” is there is a great indication in medium breast with small ptosis trying to con- vert a two stages breast reconstruction in one stage. Definitely a specific training and a long learning curve needed to be able to perform this surgical procedures properly.

Conclusion: Conservative mastectomies with these new devices surely will get a great advance in selected patients to reacha better cosmetic outcome. Also when an inverted T-incision (short scar), is necessary, the mesh avoids a retraction of the M.pectoralis major and supports a favourable shape of the breast.

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