Lengthening and Increasing the Viability of Fat Graft with Adipose Deriveted Stem Cell (ADSC) and Platelet Rich Plasma (PRP) at Breast Rippling Deformitiy after Augmentation with Silicone Implant

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INTRODUCTION: Rippling, palpable and vissible lumpiness is a fairly frequent observation after breast augmentation with silicone implant at subglandular, prepectoral muscle plane [1]. In this study we aimed to share our experience about aplication of autologous ADSC and PRP added fat graft for increasing the viability.

MATERIALS AND METHODS: 33 years ,W, 49kg,BMI < 17, sportive and very thin , was refered with rippling at both of breast at superiolateral side. Silicone implants were inserted to subglandular plane 20 months ago. It was decided to use autologous ADSC and PRP added fat graft. Rippling areas were marked with skin marker. Then fat graft was harvested and applied subcutaneously thorough minimal incision with cury canule to the marked areas, 4cc for areas at both breast. 50cc fat tissue was used to obtain ADSC. Lipofilled areas were marked at transparencies(transpaternt paper).After surgery,prepared autologous PRP and ADSC are applied to the same areas with transparencies assintance. 2 plastic surgeons assessed patient for rippling deformity changes in postoperative 1st week, 1st and 3rd month with a scale that evaluates the lumpiness, appearance, naturality of the result.

RESULTS: Patient satisfacion rate was 100% in touch feeling and appearance under the bra. The patients was so thin and didn't want to major operations. Because of this we tried to do the least invasive surgery and the minimum number of fat graft injections. In order to achieve this, we lengthen and increase the viability of fat with ADSC and PRP.

CONCLUSION: Rippling and other aesthetic complications related with breast implants have been very difficult to manage with secondary surgery. High recurrence rates and low patient satisfaction are frequent. Several methods like using fasia lata, acellular dermal matrix, changing the size, position and nature of the implant are options for solving the prolem. Fat graft is another choise but the area is small and the quantity is very low. So, viability is a problem here. İnsulin, insulinlike growth factor-1 (IGF-1), and basic fibroblast growth factor, VEGF are another options for increasing the viability but these are not cost effective and autologous [2]. We believe that fat graft combined with ADSC and PRP provides restoring the deformity with minimal skar and autologous material and aesthetic result and lengthening the viability of fat graft.

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