

BREAST SHAPING WITH AUTOLOGOUS FAT MICRO GRAFTS COLLECTED BY WATERJET ASSISTED LIPOSUCTION: FIRST RESULTS OF A PROSPECTIVE MULTICENTER STUDY

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Purpose: Body reshaping for buttocks and breasts by autologous fat grafting is successfully performed for many years. Nevertheless collecting and preparing the fat is a time consuming procedure. The following method focuses on a quick, efficient and preserving fat cell harvesting to reshape the breast with the collected tissue.

Methods/Technique: Fat is harvested with a water jet assisted Bodyjet® system (Human Med Company, Germany) with tumescence solution using a specially designed fat collector, which avoids any centrifugation. To evaluate the method, the rate of surviving adipocytes and preadipocytes was tested. A prospective multi center clinical trial was designed. Excluding criteria for augmentation patients are smokers, obesity (BMI over 30) and genetical disposition for breast cancer. For breast reconstruction, excluding criteria were tumour reoccurrence, smokers and obesity. Pre op and six months post op MRI of both breasts was performed, further clinical investigation and photo documentation on day 1 and 8, 4 weeks, 12 weeks and 6 months post op.

Results/Complication: In over 150 patients, the harvested fat was transferred using the Coleman technique under local anaesthesia with Lidocain® with 10 cc syringes and 1 mm cannulas. The results showed that an approximate take up rate of 2/3 for transplanted fat grafts, negative side effects have currently not been observed. The main advantage is the time efficiency and the preserving way of harvesting the needed tissue under low pressure (-0.5 bar). The average time to transplant 200-250 cc of fat takes 1 and ½ hours. Due to the lack of centrifugation a lot of time is saved. Fat aspirating, collecting and transplantation can be performed at the same time.

Conclusion: Water jet assisted aspirating helps a lot to save time in the fat harvesting step. Further studies must standardise the best condition of harvesting and transplantation for the fat cell to survive.

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