

Regenerative Clinic Statement on Use of Micro-Fragmented Adipose Tissue (MAT) in Treatment of Degenerative Chondral Joint Pain.

“Chondral lesions of joints represent a challenge for the orthopaedic surgeon. Current treatments, including joint replacement, carry substantial risk, and in a significant proportion of patients may have poor outcomes and can require revision surgery. Recently, new therapeutic approaches, such as the use of mesenchymal stromal cells, have shown promising results. The adipose tissue is a good source of these naturally occurring regenerative cells, due to its abundance and easy access.

Studies show the safety and feasibility of using autologous and micro-fragmented adipose tissue in patients affected by diffuse degenerative chondral lesions. The technique is safe, minimally invasive, simple, one-step, with low percentage of complications, and compliant with the regulatory environment. We conclude that the injection of autologous micro-fragmented adipose tissue (MAT) obtained with the Lipogems® system in the case of non-responsive joint pain appears to be a promising and viable treatment. It is on this basis that we endorse Regenerative Clinic in its provision of this treatment to patients. We are unanimous in our belief that Regenerative Clinic should only offer such treatments in the context of robust data collection pertaining to internationally recognised outcome measures.”

Regenerative Clinic Statement on 1-Year Outcome Data Set.

“Intra-articular injection of micro-fragmented adipose tissue (MAT) is a minimally invasive technique that has shown promising results for improving function and reducing pain in patients suffering with arthritis. We have evaluated the clinical outcomes of patients (n=84) with knee osteoarthritis (KOA) at 1-year following MAT treatment. A significant change was recorded comparing pre- and post-operative outcome measures. Positive responses for VAS and OKS were observed for 76% of patients at 3 and 6 months, and 83% for those who have reached the 12-month follow-up. In conclusion, the study demonstrates a significant improvement 1-year following MAT treatment for patients suffering KOA. Most patients experienced reduced pain and increased functionality. Paired with the minimally invasive approach, MAT looks to be an ideal interim treatment for joint arthritis that can delay the need for arthroplasty, preserving the native joint and delaying replacement. Further studies are required to identify the point at which efficacy may be lost. These data support our continued provision of MAT treatments to Regenerative Clinic patients.”

Regenerative Clinic Statement on Combined Use of Platelet Rich Plasma (PRP) with Micro-Fragmented Adipose Tissue (MAT).

“One of the most interesting developments in practical applications of fat grafting in recent years is the use of pro-survival strategies to improve maintenance of volume. PRP plays a decisive role in the repair and regeneration of different tissues via the activation and secretion of a great variety of growth factors and other cytokines stored in the alpha-granules of the platelets. Regenerative Clinic is aware of published reviews assessing the efficacy of PRP mixed-fat grafting as a pro-survival strategy for fat grafts. Results indicate that PRP may have a dose-dependent positive effect on fat grafts and suggest low complication rates. Furthermore, published data reports that fat grafting with 20% to 30% (v/v) PRP and adipose derived stem cells constitutes an appropriate transplantation strategy for improving graft survival. In light of these advancements, we believe that where possible Regenerative Clinic should offer patients a modified treatment, which combines MAT with PRP (25% v/v) injection at a single timepoint. We have decided to term this combined treatment AMPP (Activated Mesenchymal Pericytes with PRP). The use of AMPP at Regenerative Clinic will be a specific focus for data collection and future outcome measure analyses.”

Regenerative Clinic statement on Tumescant Liposuction (Fat Harvest) without Local Anaesthetic.

“Regenerative Clinic recognises recently published data indicating that local anaesthetics such as lidocaine or ropivacaine are damaging (cytotoxic) to adipose-derived stem cell (ASC). Studies report that the removal of lidocaine from the tumescant fluid, routinely used for tumescant liposuction, significantly reduced stromovascular fraction (SVF) and ASC apoptosis in the lipoaspirate. In light of this evidence, Regenerative Clinic will no longer permit the routine use of local anaesthetic during fat harvest (tumescant liposuction). Instead, the consultant anaesthetist looking after every Regenerative Clinic patient will employ deep sedation, or if preferred, a short general anaesthetic to ensure the patient’s comfort. Regenerative Clinic will thereby eliminate the routine use of local anaesthetic during fat harvest. Only in extremely frail patients (ASA-3) will use of local anaesthetic be authorised, and such patients (very small numbers) will be warned that the local anaesthetic used may negatively impact on treatment outcome. Henceforth, tumescant liposuction without local anaesthetic is a standard of care at Regenerative Clinic.”