



## **Adipose derived stem cell and autologous conditioned plasma injection treatment for the treatment of osteoarthritis (ACP-SVF)**

You've been listed for a procedure called ACP-SVF injection to treat pain from arthritis. Please find below some information about the procedure as well as the expected outcome, potential benefits and possible problems for your information:

### **What is ACP-SVF?**

Biological treatment options have gained growing interest in recent years. ACP-SVF combines the known benefits of the blood product Platelet Rich Plasma (PRP, also called autologous conditioned plasma – ACP) with the regenerative potential of adipose derived stem cells (also known as autologous stromal vascular fraction - SVF). This combination has been suggested as having a promising approach in the treatment of degenerative joint pain and osteoarthritis. Adipose derived stem cells are easy to collect. In a laboratory setting they can differentiate into different cell lines such as bone, fat, cartilage and muscle and secrete a large number of cytokines and growth factors. Adding PRP/ACP provides a synergistic effect that promotes the proliferation and differentiation of the adipose derived stem cells.

### **What's going to happen when I come in?**

The procedure is carried out in theatre under general anaesthetic. The adipose cells are harvested from the abdomen through one or two keyhole incisions, using a special suction needle. This works similarly to liposuction, but only a very small volume of fat cells (about 60 ml) is required. For the ACP/PRP a small blood sample is obtained from a vein in your arm. Both samples are then prepared in a special centrifuge to concentrate and isolate the best cells, cytokines and growth factors. The final fluid preparation is then injected into the affected joint under x-ray or ultrasound guidance. The whole procedure takes approximately 60 minutes and you should be able to go home later on in the same day.

### **Is it going to be painful?**

You can expect mild pain and bruising from the abdomen where the adipose graft is harvested from. The injected joint may ache a bit for a few days, but ice packs and simple painkillers will help.

### **Possible side effects:**

Since the injection only contains fluid and cells from your own body, there should be no major side effects. You may experience mild pain/irritation for a few days and there may be some bruising.

### **Any other complications?**

Infection is a very rare complication following the treatment. If you notice increasing redness, swelling and pain 3-10 days following the procedure you should seek advice from the surgeon, your GP or a Doctor in A&E. Most infections can be treated with a course of Antibiotics, rarely is further

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surgery required to deal with an infection. Since only your own body's tissue and blood is used, there is no risk of transmission of blood-borne diseases from unknown donors.

Perforation of the abdomen/inner organs is an extremely rare complication during the harvesting of the adipose cells. The surgeon carrying out the harvesting procedure has many years of experience in this procedure and the risk is therefore very low.

Bruising: Mild bruising is common in the area where the fat is harvested. This will disappear with time and is not of any major concern

**Likely outcome**: ACP-SVF is a relatively new treatment. The scientific literature and research so far demonstrate that the procedure is safe and effective with very good outcomes. As with many other treatments, there is no success guarantee. You may not notice an improvement in your symptoms straight away. This may take up to 2 months. During that time, you should experience a slow improvement in pain levels. Research suggests that some patients continue to improve for more than one year following the procedure.

**Restrictions following ACP-SVF procedure**: You can mobilise as pain allows straight away. You can ice the joint for a few minutes several times a day if necessary. Avoid heavy lifting and strenuous work as well as sporting activities for 4-6 weeks to support the healing process.

**Physio**: You will have Physiotherapy to support the rehab process. This is important to maximise the outcome from the procedure.

**Non-steroidal anti-inflammatory medication (NSAID's)**: NSAID's can suppress the effects of the growth factors in the ACP-SVF injection. You should therefore stop taking any NSAID's for 7 days before and after the injection. Commonly used NSAID's are Voltarol, Ibuprofen, Nurofen and Naproxen

If you would prefer to discuss this again with me prior to treatment then please contact my secretary: Tel 07935 480188, email [jfortho.secretary@gmail.com](mailto:jfortho.secretary@gmail.com)

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