Complications:

Infection is a possibility after any injection, however, we are unaware of any reported infections with this fat graft technique.

Use of Fat Graft with Other Joint Injection Techniques:

Fat graft injection may be accompanied by Platelet Rich Plasma (PRP) and/or Bone Marrow Mesenchymal stem cell injections. Evidence indicates that the effects are additive. Every patient is different and a custom program is designed for every patient's needs.

Illinois Sportsmedicine and Orthopaedic Center

Bone Marrow Stem Cell Injection & Fat Graft Injection for Arthrosis & Sports Injuries

Platelet Rich Plasma (PRP) Injection with Stem Cell Injection:

Evidence indicates that PRP helps improve the effects of stem cell injections. PRP also provides your own natural growth factors for the affected area. Therefore we often combine PRP injection with stem cell and/or fat injections. Illinois Sportsmedicine and Orthopaedic Centers 1714 Milwaukee Ave Glenview, IL 60025

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Bone Marrow Mesenchymal Cells

Bone marrow is a rich source of mesenchymal stem cells. Stem cells have powerful anti-inflammatory and healing properties .

Procedure:

The procedure is performed in the office. While lying face down, the iliac crest bone and the tissue over it is numbed with a local anesthetic. A special needle is then inserted into the bone and then advanced into the bone marrow. This area is a rich source of stem cells.

A syringe is then used to aspirate a small amount of this bone marrow, only about 12cc or two teaspoons. The bone marrow is harvested one cc at a time while the needle is painlessly rotated to increase the yield of stem cells. Discomfort is minimal. The syringe is then transferred to another needle for relatively painless injection into the joint under ultrasound.

Results:

Clinical experience has shown a beneficial effect on joint pain in most but not all patients.

Complications:

Infection is a possibility after any injection, but there have been no reported infections with this technique to our knowledge.

Use of Bone Marrow Cells with Other Joint Injection Techniques.:

Bone marrow may be used with both PRP and fat graft injection as well as with growth factors. Evidence indicates that the effects are additive. Every patient is different and a custom program is designed for every patient's needs.

Fat has been shown to have cushioning and anti-inflammatory prop-

Fat Graft Injection

erties. Fat is also a very rich source of stem cells. For example, Hoffa's fat pad in the knee is important in knee function and healing and we believe the fat graft functions by augmenting its function in a natural, biologic fashion.

Procedure:

The procedure is performed in the office. After local anesthetic is applied in the skin, tiny nicks are made in either the abdomen or "love handle" area. A thin cannula is inserted and fluid containing a saline solution and local anesthetic are instilled, which numbs the area. Another thin cannula is inserted and a small amount of fat is removed, about 2 ounces or so. This is much less than is removed in cosmetic liposuction. There is generally very little pain during the liposuction. You may have a little soreness for a few days after the injection.

Results:

Clinical experience has shown a beneficial effect on joint pain in most, but not all, patients.