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GIVING LIFE TO POSSIBLE

PROPER RECOVERY FROM SURGERY and ORTHOBIOLOGICS (Stem Cells, PRP):

People often ask what they can do to speed up healing from surgery. There are limits to healing, and built into your surgical care and rehab are many details meant to promote optimal healing. Dr. Shybut is actively engaged in pushing these limits, and two particular therapies of interest are platelet rich plasma (PRP) and mesenchymal stem cells (MSCs).

STEM CELL THERAPY:

Your body contains a reservoir of stem cells in bone marrow. One of the richest sources of stem cells in bone is the bone that forms the brim of the pelvis. Bone marrow is harvested from this bone with a needle, then centrifuged and filtered to concentrate the mesenchymal stem cells (MSCs). This bone marrow concentrate (BMA) can be injected into joints or at the sites of surgical repairs. Dr. Shybut has seen good results with this procedure thus far and has research studies in development to more rigorously evaluate outcomes with this procedure.

Platelet Rich Plasma:

Platelet rich plasma (PRP) has received attention from the press because it has been used to treat tendon, joint, and ligament injuries in high profile athletes. The procedure involves drawing blood from a vein and spinning it in a centrifuge to concentrate the platelets. When activated, the platelets release growth factors that are thought to assist in healing. PRP has been used successfully in treatment of tendon injuries, ligament sprains, and may have applications for the treatment of arthritis pain.

A NOTE ON SMOKING:

One thing you absolutely must not do if you want optimal healing is to smoke. In the words of the American Academy of Orthopedic Surgeons, "Smoking threatens orthopedic outcomes." Smoking has been shown to result in WORSE outcomes for multiple types of



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orthopedic surgery. Smoking delays ligament and bone healing. Smoking may also be a factor in development of rotator cuff tears, smoking also worsens arthritis and disc disease in the spine. In summary, if you don't smoke, don't start. If you do smoke, quit before surgery. If you do not, you are directly compromising your outcome and risking failure or at least a worse result from surgery.