

biologics

Stem Cell First Aid Kit?

Could the latest thing in sports medicine be banking stem cells for future use in the regeneration of soft tissue? One biotech business is banking on it!

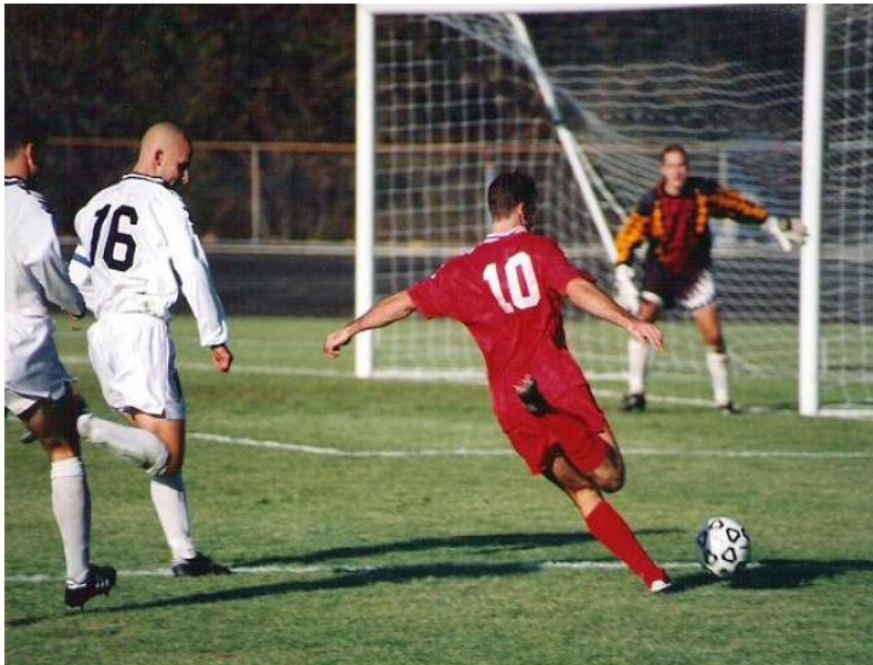
Mesenchymal stem cells (MSCs) have become one of the most promising parts of stem cell research. Now some in the sports medicine community and the world of stem cell research are looking to take advantage of future advances before they even happen.

Umbilical cord blood banking has become commonplace for new parents, but a novel banking process is gaining interest, especially among athletes seeing potential for their own health as well as that of their children. Amniotic fluid is one of the richest sources of MSCs and can be easily collected during the second trimester of pregnancy similarly to how an amniocen-

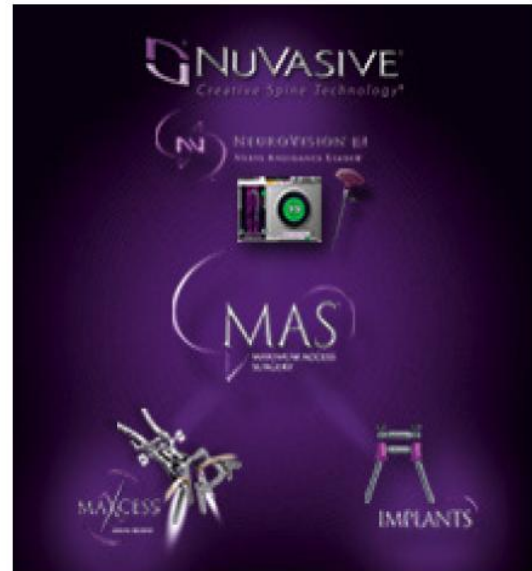
tesis is administered (the two procedures can in fact use the same collected fluid).

Biocell Center is leading the promotion of this type of stem cell collection, purporting to be the “only company in the world offering private preservation and banking of amniotic fluid cells, including amniotic fluid stem cells, collected during second trimester genetic amniocentesis.”

The international firm has a cadre of banks on several continents offering “amniotic fluid cell cryopreservation services.” This banking service sets new parents back about \$3,000 initially, with annual storage rates of just over \$100. For now, most of the banked amniotic fluid comes as an off-shoot of amniocentesis, but perhaps soon, expectant moms will request storage of the fluid for the sole purpose of regenerative therapies.



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Maybe it's having the World Cup in full swing, but the time seems ripe to look for ways to extend the careers of valuable and experienced athletes. Imagine a top athlete storing stem cells from his infant's amniotic fluid, stem cells which could later be used for his own healing and that of his child as well. It's like having a customized emergency repair kit that is designed to work just for you.

The concept sounds so promising that according to Biocell press releases, some athletes are not wasting time wondering and are instead seizing the moment and storing these cells when the window of opportunity presents itself.

Applications of this stem cell therapy include bone, cartilage and tendon regeneration. So the hope is for example, that worn knee cartilage, which causes inflammation and pain, could possibly be cured with a simple injection of stem cells, which will in turn grow new, healthy cartilage in the knee.

—JR (June 23, 2010) ♦