

Speaker 1: So there are four big ways that stem cells are going to work in the body. The first is an anti-inflammatory property. Generally when we talk about inflammation that is where we talk about anti-inflammatories like Tylenol, and Ibuprofen. We understand that those are going to decrease inflammation. Stem will decrease inflammation like that. Second, one of the benefits that we see from stem is their significant remodeling of scar tissue. Where there have been injuries there is a significant amount of scar tissue and in stem, there is tumor necrosis factor, this TNF and what that will actually do is help remove prior scars and remodel those areas.

The third thing that we see from stem is the capacity to regenerate. Now, by definition of stem cell is a cell type that can become more than one tissue type. The fourth big thing that you'll see in stem is immune modulation. What stem will do is it's going down-regulate the non-specific elements of inflammation. You'll see a rise in these growth factors that are vastly important to healing. So TGF is one, IGF is one, BMP is one. What's happening is its immune up-regulating the important mediators of healing while it's down-regulating those which are more non-specific and actually quite uncomfortable for you as a patient.

Looking at those four different ways that we see the stem cells working anti-inflammatory, scar remodeling, regenerating tissue, immune modulating, overall, when you take a patient has maybe a knee injury or shoulder injury they simply cannot mount this level of growth factor until you introduce the stem into a joint that's horrendously injured and you see by regulating these elements that there's just an unlocked healing potential that you do not see with common medications. And this is one of the reasons that stem is just so promising.