Orthopedic Immunobiologics: A Gold Standard for Management in Organic Joint Pain

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Scientists have deciphered the inflammatory pathways and we now have a better understanding of the disease’s spatiotemporal signaling complexities that have identified gene products tuned by epigenetic modifications. Advances in single cell proteomics and MR spectroscopy now lead the charge in clarifying master protein regulators during inflammation and organic joint disease. Defining major players in both canonical and non-canonical pathways led researchers to the conclusion that inflammatory and osteoarthritis follow the same biological signaling pathways. This has led to an explosion in the development of human biologics and biosimilars that remain to be tested in the osteoarthritis population. We just don’t know and we definitely cannot afford it.

Now that there is clear evidence these techniques work, orthopedic surgeons need to present their data and define what is being categorized as a successful treatment. How long does it last? Only with that data will third party payers be able to determine if the value play is there for them in the long term. The terrific burden that is shifted to the patient is not understood by the general public. Sadly, many patients are being taken advantage of. Until a gold standard of treatment is available, the field will stagnate. Poorly designed studies cannot be used to guide treatment and have only marketing value, not scientific value. Let’s be honest.

Continuing, putting profits before patients can’t be part of a gold standard in any medical or surgical field, although it has become more tolerated by both government and the general public. Since the opioid crisis caused a major shakeup, this model has become the norm for many pop-up pain clinics that masquerade as orthopedic sports medicine clinics. That is not likely to stop, patients lose hope and subjectivity equally, and can be harmed both financially and psychologically if they find they have been victimized.

All patients deserve appropriate work up, communication with their primary and other doctors, incoming and serially recorded outcomes analysis, imaging, laboratory examination to exclude malignancy and imaging of any area to be surgically manipulated, which yes, you are doing in this procedure. If we all really want the best thing for patients we must agree on a clinically sound pathway in this setting. Patients deserve to know what they are paying for and every clinic should at least be producing total nucleated cell counts (TNCs). ELISA is fun but expensive. FLOW cytometry is an interesting tool but clinically not available to use in the US.

In the vast majority of cases, clinics are falsely advertising or insinuating orthopedic expertise through a variety of tricky marketing tactics aimed to confuse or mislead the viewer. These clinics hire and train other untrained, inexperienced doctors to performing the work, usually at the bidding of a large franchise operation driven by financially driven greed. Better than occupational medicine career for sure, but real honest training is available and patients deserve that, just no excuse to claim expertise in anything after a weekend of marketing lessons out West.

Our first job is to be responsible for and advocate for patients. Let’s all do that. The first golden rule could be “Stay in your Lane”. That’s just the best for everyone. Go further. Swim your real stroke, the one you know in your heart is right. Go for the gold standard. Even bronze would be good, and the way this race is going, it’s up for grabs.

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Figure 1

Figure 2
