The emerging trilogy in restorative joint technology

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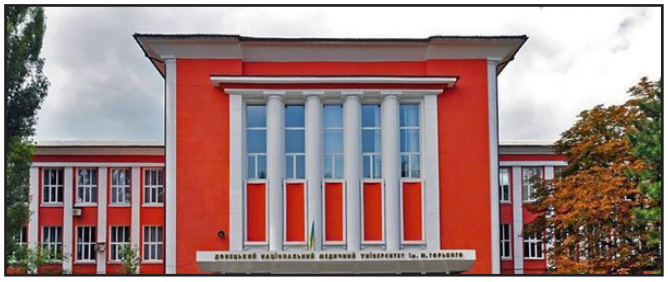
Abstract:
There is increasing interest in the combination,if not integration of multiple technologies in the delivery of healthcare. In orthopaedics the emerging trilogy is placing strains on the healthcare system and the doctors delivering treatment to patients.

Healthcare is experiencing growth in treatments that are similar to the computer chip advances in the 70s and the advent of 'Moore's law.'

Medical systems however are different of course due to regulatory hurdles and the long lead times to establish proof of concept which has various leads time from proof of concept to clinical proof .

Lets analyse the current state of play with the implants and technique particularly as it relates to minimally invasive surgery of the foot and ankle.

How does this than combine with biologics. Biologics have long been an interest of mine but what does the data show. Biologics to me has two specific branches. Stem cell technology adding in pluripotential cells in the hope they will differentiate into what is needed where they are needed. Initiators and enhancers that promote the native cells to differentiate and divide to heal the given pathology.



Th last component of the new triology in surgery relates to artificial intelligence. This I believe we haven't even began to utilize to its full potential. From a practical point I the clinic an assistant that can give a list of provisional diagnoses even allowing the doctor to store up the diagnostic dilemma in a given patient interaction will save time.

Even a surgical tip in the patient file from previous experience will decrease the learning curve and deliver a better standard of care.

Lets look at some complex clinical cases and see how are solutions can be applied.

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