Regenerative Medicine Weapons to Fight the Degenerative Defect of Musculoskeletal System Disorders

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Editorial

To stop the extension of tissue degeneration resulted from any disease, you can use the usual treatments antibiotics, anti-inflammatory, anti-histaminic and so on. But to fight the degenerated tissue itself and restore its function and healthy structure, you will need more advanced and strong weapons. In the regenerative medicine field, there are 3 major weapons which are stem cells, growth factors and scaffolds. In the past, doctors used to use only one of them at a time but nowadays they tend to combine 2 or the 3 in one shot.

The concept of combining the stem cells, growth factors and scaffold was demonstrated to be efficient for regeneration of bone[1,2], cartilage[3], muscle[4], tendon[5] and nerve[6].

Most of these studies was conducted at in vitro and in vivo level, supposing that will perform the same efficiency when be applied in the clinical cases.
References