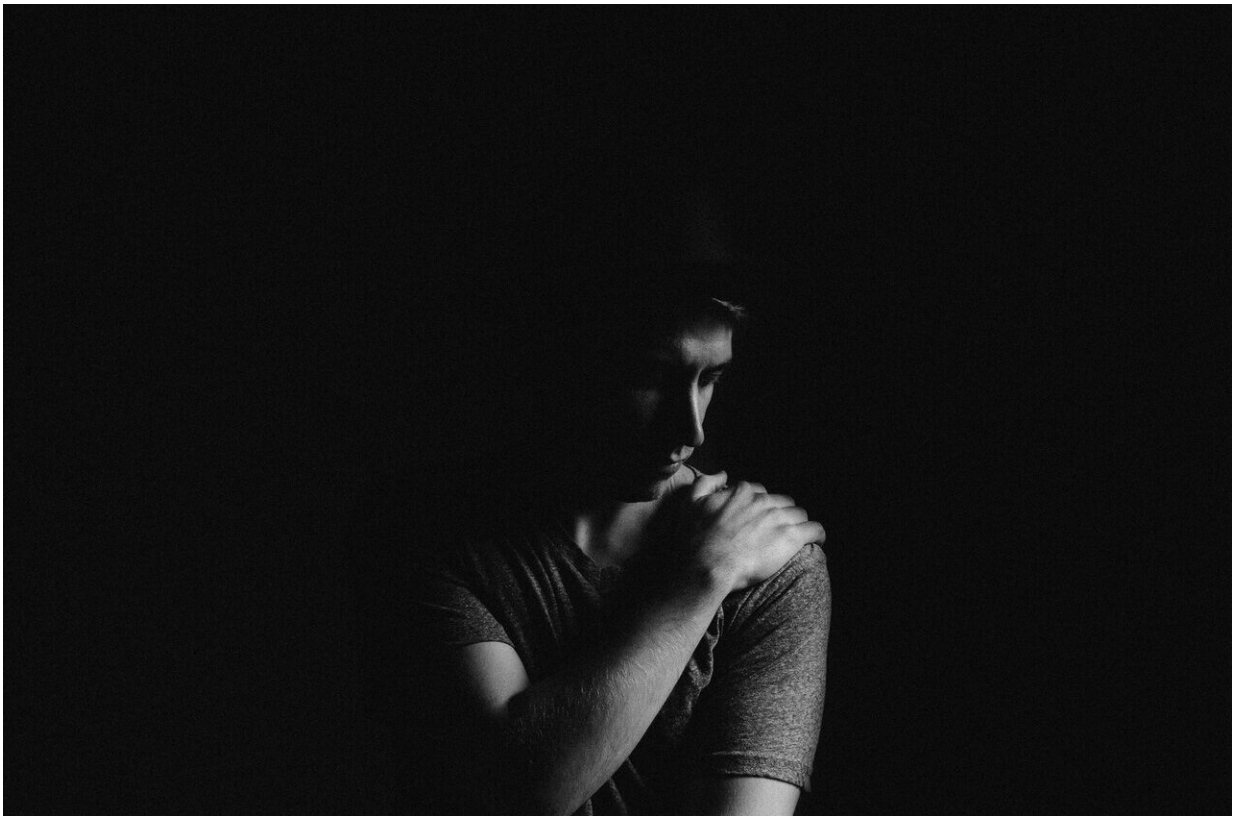


The promise of regenerative medicine to treat chronic pain

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Credit: Unsplash/CC0 Public Domain

The use of regenerative medicine to lessen chronic pain holds enormous potential, and the body of evidence to support the practice is growing, said Alexios Carayannopoulos, DO, MPH, DABPMR, chief of the

departments of physical medicine and rehabilitation at Rhode Island Hospital and Newport Hospital, chief of the division of physical medicine and rehabilitation of Lifespan Physician Group, and associate professor at Brown University Warren Alpert Medical School.

Carayannopoulos will moderate a Nov. 19 session, "Regenerative Medicine: What Has Worked and Where is the Evidence?" during the American Society of Regional Anesthesia and Pain Medicine's 20th Annual Pain Medicine Meeting in San Francisco and virtual.

Regenerative medicine "is stepping further and further out of the lab," he said, adding that he would like the session to provide "a broader understanding of—and appreciation for—the theory behind [regenerative medicine](#) and its promising applications in [pain management](#)." Research on animal models and evidence from limited FDA-approved applications on humans—such as stem cell use—make clear the field is wide open.

Regenerative medicine is the practice of replacing, repairing, or regrowing damaged cells, tissues or organs. Current animal-based research, for example, is studying the efficacy of regenerative medicine in treating pain related to osteo-arthritis and diabetic peripheral neuropathy, among others. Also being researched are indications that injecting certain types of stem cells into people with [spinal cord injuries](#) and [degenerative disc disease](#) can have an analgesic effect on severe debilitating nerve or neuropathic pain as well as skeletal or nociceptive pain. Carayannopoulos said if confirmed in [human studies](#), the spinal injury findings raise the specter of being able to using more aggressive rehabilitation to treat such injuries.

Regenerative medicine applications are slowly becoming commercially viable but it is an unregulated industry with a long and expensive road to federal Food and Drug Administration approvals. In addition, insurers do

not generally cover regenerative medicine applications, which puts them out of the reach of most patients.

Despite these hurdles, Carayannopoulos said the practice has such enormous implications in pain treatment that it could alter how medicine is practiced and even the length of a healthy human lifespan.

"Most of the things we do in pain management are palliative. Regenerative medicine is, by its nature, potentially restorative and that has implications for population dynamics because of its preventive medicine potential," he said. "There are many applications of regenerative medicine in pain management, and one of the benefits is that theoretically you could be turning back the time clock. It has a potentially tremendous impact on healthcare and the cost of its delivery because of the potential to limit unnecessary procedures and surgeries."

The meeting's session will also include speakers who will address the specialty's recent advances, [evidence base](#), regulatory outlook and how it can be integrated into a provider's practice.

More information: Meeting: [www.asra.com/events-education/ ... ain-medicine-meeting](http://www.asra.com/events-education/...ain-medicine-meeting)

Provided by American Society of Regional Anesthesia and Pain Medicine (ASRA)

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