Department of Biomedical Engineering
The Chinese University of Hong Kong

Mesenchymal Stromal Cells and PRP in Osteoarthritis:

Hope, Hype and the Hard Evidence



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Venue : Room 706, William M W Mong Engineering Building, CUHK

Abstract

"Regeneration" has become one of the most compelling and potentially misleading concepts in osteoarthritis care. Without an approved disease-modifying treatment, mesenchymal stromal cells, platelet-rich plasma, and newer orthobiologic products offer an attractive promise: less pain, restored cartilage, and avoidance of joint replacement. This promise has generated enormous enthusiasm among patients, clinicians and commercial providers, but has the evidence kept pace?

This presentation will critically examine the biological rationale and clinical evidence for regenerative therapies in osteoarthritis. It will distinguish the plausible paracrine and immunomodulatory effects of mesenchymal stromal cells from unproven claims of cartilage regeneration, and explore why differences in cell source, processing, dose and viability make these products difficult to compare. The presentation will consider the apparent symptomatic benefits reported in some studies alongside the lack of convincing structural change, inconsistent placebo-controlled findings, incomplete intervention reporting, and the high prevalence of spin in the literature.

The presentation will also examine how commercialisation and media narratives have accelerated adoption ahead of definitive evidence. Finally, it will consider what ongoing phase 3 trials, advanced imaging and improved patient phenotyping may contribute. Regenerative therapies should be neither dismissed nor promoted prematurely: progress will depend on better biology, better trials and better selection of the patients most likely to benefit.

Biography

Professor Hunter is a rheumatologist clinician-researcher whose primary research focus is clinical and translational research in osteoarthritis. He is ranked as the world's leading expert on osteoarthritis on expertscape.com, is the section editor for UpToDate on osteoarthritis, is the co-Editor-in-Chief of Osteoarthritis and Cartilage, hosts the Joint Action podcast, and has over 800 publications in peer-reviewed journals. He leads the osteoarthritis team at the Kolling Institute, which is dedicated to improving our understanding of osteoarthritis and the quality of life for those living with this prevalent, disabling disease.

***** ALL ARE WELCOME *****

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