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A new treatment for hip osteoarthritis: clinical evidence for the efficacy of autologous conditioned serum

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Abstract: The purpose of the present study was to investigate the effect of intra-articular injections of autologous conditioned serum on human hip osteoarthritis and to test whether a potential treatment effect might be increased by additional injections of steroids and the recombinant interleukin-1 receptor antagonist protein anakinra. We compared the effects of autologous conditioned serum 46 hip osteoarthritis patients), autologous conditioned serum+cortisone (56 patients), and autologous conditioned serum+cortisone+recombinant interleukin-1 receptor antagonist protein (17 patients) in a retrospective clinical study by means of the Visual Analogue Scale for pain (pre- vs post- treatment). Over 14 months, treatment resulted in a large, statistically significant improvement for patients in all three groups, independent of the severity of osteoarthritis. Neither cortisone nor cortisone+recombinant interleukin-1 receptor antagonist protein increased the beneficial treatment effect over and above the effect of autologous conditioned serum alone. Autologous conditioned serum successfully reduces pain in hip osteoarthritis. In severe hip osteoarthritis, the sole application of autologous conditioned serum can be even more beneficial than the combination of autologous conditioned serum with steroids.