

عنوان مقاله:

Curcumin as an effective suppressor of miRNA expression in patients with knee osteoarthritis

محل انتشار:

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نویسندگان:

Mahdi Atabaki - *Clinical Immunology Research Center, Zahedan University of Medical Sciences, Zahedan, Iran*

Zhaleh Shariati-Sarabi - *Rheumatic Diseases Research Center, Mashhad University of Medical Sciences, Mashhad, Iran*

Jalil Tavakkol-Afshari - *Immunology Research Center, Mashhad University of Medical Sciences, Mashhad, Iran*

Ali Taghipour - *Department of Epidemiology, Social Determinants of Health Research Center, School of Health, Mashhad University of Medical Sciences, Mashhad, Iran*

Mahmood Reza Jafari - *Nanotechnology Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad, Iran*

Amin Reza Nikpoor - *Molecular Medicine Research Center, Hormozgan Health Institute, Hormozgan University of Medical Sciences, Bandar Abbas, Iran*

Mojgan Mohammadi - *Immunology Research Center, Mashhad University of Medical Sciences, Mashhad, Iran*

خلاصه مقاله:

Objective: Osteoarthritis is the most common disease in the group of joint diseases, and its incidence is directly related to aging. Given the anti-inflammatory effects of curcumin as an active ingredient of turmeric, we aimed to investigate the effects of this compound in a new curcumin nanomicelle formula named SinaCurcumin® on the expression of microRNAs (miRNAs) involved in immune responses of patients with osteoarthritis. **Materials and Methods:** We divided ۳۰ patients with osteoarthritis into two groups namely, nano curcumin-receiving (۱۵ patients) and placebo-receiving (۱۵ patients) and we studied them for ۳ months. The Iranian Registry of Clinical Trials (IRCT) approved our study with the IRCT registry No. IRCT۲۰۱۵۱۰۲۸۰۲۴۷۶۰N۴. We evaluated the rates of the expression of microRNAs ۱۴۶, ۱۵۵, ۱۶, and ۱۳۸ employing SYBR Green Real-Time PCR method. **Results:** The expression of miRNAs ۱۵۵, ۱۳۸, and ۱۶ revealed a significant reduction in the curcumin-receiving group ($p=۰.۰۰۲$, $p=۰.۰۲۴$ and $p=۰.۰۰۰۱$ respectively). **Conclusion:** Our research data indicated that the consumption of curcumin in patients with osteoarthritis could affect the immune system partially via altering the expression of microRNAs and cytokines.

کلمات کلیدی:

Curcumin, MiR-۱۴۶, MiR-۱۵, MiR-۱۳۸, MiR-۱۶, Osteoarthritis

لینک ثابت مقاله در پایگاه سیویلیکا:

