

Efficacy of Hydroxychloroquine Combined with Leflunomide for Rheumatoid Arthritis and its Effect on Inflammatory Factor and Blood Lipid Levels

Hualin HU^{1,2} & Xunzi CAI^{3*}

¹ Department of Orthopaedic Surgery, Second Affiliated Hospital of Zhejiang University School of Medicine, Hangzhou 310009, China

² Department of Orthopaedic Surgery, Liangzhu Hospital of Yuhang District, Hangzhou 311100, China

³ Department of Orthopaedic Surgery, Second Affiliated Hospital of Zhejiang University School of Medicine; Orthopaedic Research Laboratory, Zhejiang University, Hangzhou 310009, China

SUMMARY. This study observed the efficacy of hydroxychloroquine combined with leflunomide for rheumatoid arthritis (RA) and its effect on inflammatory factor and blood lipid levels. One hundred and ten RA patients were divided into hydroxychloroquine (38 cases), leflunomide (32 cases) and hydroxychloroquine+leflunomide (40 cases) groups, which received hydroxychloroquine, leflunomide and hydroxychloroquine combined with leflunomide treatment for six months, respectively. After treatment, compared with hydroxychloroquine and leflunomide groups, in hydroxychloroquine+leflunomide group the morning stiffness duration was shortened, the number of tender joint and number of swollen joint were reduced, the Visual Analogue Scale score and Disease Activity Score in 28 Joints score were decreased, the erythrocyte sedimentation rate and serum rheumatoid factor level were reduced, and the inflammatory factor and blood lipid levels were decreased (all $p < 0.05$). For RA patients, hydroxychloroquine combined with leflunomide can effectively improve the treatment efficacy and lower the inflammatory factor and blood lipid levels, which may reduce the risk of cardiovascular events.

RESUMEN. Este estudio observó la eficacia de la hidroxicloloroquina combinada con leflunomida para la artritis reumatoide (AR) y su efecto sobre el factor inflamatorio y los niveles de lípidos en sangre. Ciento diez pacientes con AR se dividieron en grupos de hidroxicloloroquina (38 casos), leflunomida (32 casos) e hidroxicloloroquina+leflunomida (40 casos), que recibieron hidroxicloloroquina, leflunomida e hidroxicloloroquina combinada con tratamiento con leflunomida durante seis meses, respectivamente. Después del tratamiento, en comparación con los grupos de hidroxicloloroquina y leflunomida, en el grupo de hidroxicloloroquina+leflunomida se acortó la duración de la rigidez matutina, se redujo el número de articulaciones sensibles y el número de articulaciones inflamadas, la puntuación de la escala analógica visual y la puntuación de actividad de la enfermedad en 28 articulaciones disminuyeron, la velocidad de sedimentación globular y el nivel de factor reumatoide sérico se redujeron, y el factor inflamatorio y los niveles de lípidos en sangre disminuyeron (todos $p < 0,05$). Para los pacientes con AR, la hidroxicloloroquina combinada con leflunomida puede mejorar eficazmente la eficacia del tratamiento y reducir el factor inflamatorio y los niveles de lípidos en sangre, lo que puede reducir el riesgo de eventos cardiovasculares.

KEY WORDS: blood lipid. hydroxychloroquine, leflunomide, rheumatoid arthritis.

* Author to whom correspondence should be addressed. E-mail: 2506053@zju.edu.cn