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MiR-122-3p Targets Enhancer of Zeste Homologue 2 to Mitigate Steroid-induced Osteonecrosis in the Femoral Head

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KEYWORDS Enhancer of Zeste Homologue 2. Femoral Head. Mir-122-3p. Osteonecrosis. Steroid

ABSTRACT The researchers aimed to unravel the mechanism by which miR-122-3p targeting enhancer of the zeste homologue 2 (EZH2) alleviates steroid-induced osteonecrosis in the femoral head (ONFH). BMS cell suspension was transfected using miR-122-3p mimics and miR-NC vectors, and injected into mice. The mice were divided into normal, ONFH, miR-122-3p and miR-NC groups. MiR-122-3p targeted EZH2 and regulated its expression negatively. The overexpression of miR-122-3p was capable of improving trabecular parameters and increasing the expressions of miR-122-3p and EZH2. EZH2 reversed the influence of miR-122-3p overexpression on steroid-induced ONFH. MiR-122-3p plays an inhibitory role in ONFH, with its expression down-regulated. The overexpression of miR-122-3p can improve ONFH tissues and adjust trabecular parameters, probably by targeting and negatively regulating EZH2 expression.