عنوان مقاله:

Adjustment of a Fibrosis Marker, Pro-Inflammatory Cytokines, and IgE in Asthmatic Animals

محل انتشار:

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خلاصه مقاله:

Background: A lot of patients are suffering from asthma. For decreasing the asthma symptoms, we studied the effects of conditioned medium (CM) of human amniotic membrane mesenchymal stem cells (hAM-MSCs) as a source of anti-inflammatory cytokines on splenocyte and lung tissue of asthmatic Balb/c mice.Methods: Forty mice were categorized into four groups; ovalbumin (OVA)-induced asthma, CM-treated asthma, DMEM (Dulbecco's Modified Eagle Medium)-treated asthma, and saline control. Each group received related treatment. The lung alpha-smooth muscle actin (α-SMA) and splenocyte inflammatory cytokines and IgE were examined through Western blot analysis.Results: Western blot showed α-SMA overexpression in the OVA and DMEM groups compared with the saline group. CM therapy could significantly reverse it compared with OVA and OVA+DMEM categories by elevating IL-۱۰ and IFN-γ and reducing IL-۴, IgE, and TGF-β .Conclusion: CM treatment could improve asthma symptoms by adjusting α-SMA in lung tissue and pro-inflammatory cytokines and IgE in splenocytes.

کلمات کلیدی:

Asthma, Alpha-smooth muscle actin, Mesenchymal stem cell