group was observed. The thickness of intima media in S group, F group, SF group was significantly thicker than that in N group ($p<0.01$), and no significantly difference of intima media thickness between T group and N group was observed. The ratio of lumen area/total vascular area in S group, F group and SF group was smaller than that in N group ($p<0.05$), and no significant difference of ratio between T group and N group was found.

Conclusions Feeding high fat plus high salt leads to blood pressure elevation, induces atherosclerosis, increases serum concentrations of sCD40L and enhances the expression of CD40/CD40L in arterial tissues. The combination of stimulus has stronger effect than a single factor. Statins protect the arterial tissues against atherosclerosis by decreasing the level of serum sCD40L and inhibiting the expression of arterial tissues CD40/CD40L.

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RETARDING EFFECT OF SIMVASTATIN ON ARTERY REMODELLING INDUCED BY HIGH-SALT AND HIGH-FAT DIET IN RATS

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Objectives To investigate the effect of simvastatin intervention on the changes of blood pressure, serum lipid fluctuation and aortic configuration induced by high sodium plus high fat diets in rats.

Methods Sixty adult male SD rats were randomly divided into five groups (n=12); control group (N), high salt group (S), high fat group (F), high salt+high fat group (SF) and high salt plus high fat +simvastatin group (T). After fed for 16 weeks, the rats were subject to determine blood pressures and serum concentrations of TC, TG and sCD40L. The expression of CD40/CD40L in the root of ascending aorta was detected by immunohistochemical method. The thickness of intima media in the ascending aorta as well as the ratio of lumen area/total vascular area were measured and calculated after HE staining. Results In S group, F group and SF group, systolic blood pressure was significantly higher than that in N group ($p<0.01$). systolic blood pressure in T group were slightly higher than that in N group with statistical significance and significantly slower than that in SF group. The serum concentrations of triglycerides (TG) and total cholesterol (TC) in F group and SF group were significantly higher than those in N group and T group ($p<0.01$), and no significant difference between S group, N group and T group was observed. In S group, F group and SF group, the serum concentrations of sCD40L were higher than that in N group and T group ($p<0.05$), meanwhile that in SF group was also higher than that in S group and F group ($p<0.05$). However, no significant difference of sCD40L concentration between S group and F group as well as N group and T group was observed. The expression of CD40/CD40L in the ascending aorta in S group, F group and SF group was higher than that in N group and T group ($p<0.05$), and that in SF group was higher than in S group and F group ($p<0.05$), and no significantly difference of CD40/CD40L expression between S group and F group as well as N group and T