

flow dynamics in a low-pressure region and then somehow transported to the collapse region where the liquid pressure is high enough to cause bubble collapse. The resulting elevated pressures and velocities created in the liquid by such collapse may interact with the material surface to cause erosion. This interaction is affected by many parameters, including those of the fluid, such as the local pressure, temperature, and velocity, and the viscosity, compressibility, and surface tension of the liquid, along with the mechanical properties of the eroded material, perhaps on a microscale and in extremes.

**Result** Risk factors for the AS may affect the parameters or repair of endothelial cell.

**Conclusion** Cavitations erosion may be the direct factor for AS.

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### CAVITATION DAMAGING ENDOTHELIUM AND CORRELATION WITH RISK FACTOR FOR ARTHEROSCLEROSIS

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**Background** In the past 70 years, cavitation erosion has become an important problem in various fluid-handling machinery, and as a result a lot of technical literature has been published in this field. Atherosclerosis (AS) is the most important cause for the reduction of the quality of life and even of death of the patients in the industrialised world. Artery is a series of distributing, and the blood is saturated with gaseous solution, and hypertension is the most dangerous factor; all these factors hint that cavitation erosion is the direct factor for AS. But, we did not find literature about relation between fluid erosion and cardiovascular disease. So here we aim to explain atherogenesis by the theory of fluid erosion.

**Method** Analysing the arterial blood, we found that the name of AS already includes the condition for cavitation. Briefly, one must consider the following portions of the overall phenomenon. The bubbles or voids of any sort, are created by the