

WHY DOES OEDEMA DEVELOP IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE?

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Summary

The discussion is held on early theories ("cardiac" and "renal") of peripheral oedema development in COPD. It is considered that only current "vascular theory" can adequately explain the mechanisms of oedema genesis in COPD. According to this theory, the major cause of oedema is hypercapnia. Increased concentration of carbon dioxide, which is a potent vasodilator, decreases peripheral vascular resistance and increases arterial vascular bed capacity. Due to reduced capillary tone a filtration equilibrium point shifts in distal direction, causing the fluid to leave the vascular bed, and the loss of a serum volume. Only the blockade of carbon dioxide effect on capillary sphincters can probably stop the flow of fluid into the tissues.