In order to improve the effectiveness of a previously described \(^1\), \(^2\) isolated guinea-pig lung technique, the apparatus was redeveloped and modifications were introduced. The artificial thorax volume has been reduced considerably and air conditioning adopted instead of waterbath heating. The cover-plate is equipped with a calibrated orifice, magnetic locking and pass-through electrodes for vagal nerve stimulation. Aerosol generators of the “obligatory liquid filtration” type are used (modified D31). A special device permits the measurement of tidal respiratory volume. An appropriated pump with a pressure-restoring valve is used. The lungs are only breathing air; oxygen and carbogen were found to be too irritating. As Tyrode, a slightly hypertonic solution is used to avoid lung edema formation. This technique permits to keep isolated lungs in good conditions during several hours. This technique may also be used for isolated rat lungs.

**References**


**Mechanisms of Centrally Induced Pulmonary Edema**

Lloyd D. Seager

Department of Pharmacology, University of Arkansas Medical Center, Little Rock, Arkansas, U.S.A.

A variety of factors involving the central nervous system have been shown to be associated with the development of pulmonary edema. In clinical experience...