

group. Airway resistance was higher and conductance/volume ratios were lower in the older men. Changes of pulmonary physiological parameters with age in men may be secondary to increased pulmonary compliance in the elderly.

-- Aerospace Med. Absts.

- 439 Pulmonary Surface Tension in Experimental Atelectasis. T.N. Finley, et al. Am. Rev. Resp. Dis. 89, 372-378 (March, 1964).

The results of the present studies are consistent with the hypothesis that: (1) the stability of the alveoli requires that the respiratory surfaces be lined with a material that reduces surface tension to low values; and (2) the maintenance of the lining material requires that there be adequate alveolar capillary blood flow. Atelectasis per se does not cause an increase in surface tension of lung extracts. This is substantiated by the following findings: extracts from lungs that were still collapsed 10 weeks after ligation of the bronchus had normal surface tension; extracts from lungs that were made atelectatic by bronchial ligation for less than 48 hours had normal tension, and in cases of pulmonary artery occlusion, the increase in surface tension of lung extracts occurred before the development of atelectasis.

-- Authors' summary

- 440 Atherosclerosis in Europeans and Bantu. B.J. Meyer, et al. Circulation 29, 415 (March, 1964).

The atherosclerotic "profile" of the aorta, coronary and cerebral arteries was gauged by means of the atherosclerotic index method in 540 unselected white and Bantu autopsy cases. Of these, 87 white men, 58 white women, 11 Bantu men, and 85 Bantu women, were over the age of 25 years. Ten of the white men and 5 of the white women over 25 years of age had died of coronary occlusion. None of the Bantu had died of this disease. The percentage of deaths due to cerebrovascular accidents was about the same in whites and Bantu. After the third decade, atherosclerosis was more severe in the aorta and coronary arteries of the whites than in those of the Bantu. No racial difference was noticed in the cerebral arteries. The coronary arteries in cases of death due to coronary occlusion almost invariably showed severe atherosclerosis, but the cerebral vessels did not invariably show macroscopically discernible atherosclerosis in cases of death due to cerebrovascular accidents.

-- J. Am. Med. Assn. References & Reviews

- 441 Cancer and Life Span in Smokers and Nonsmokers. C.M. Plair and S.L. Wilens. Am. J. Med. 34, 88-92 (Jan. 1963).

Surprisingly few data are available on the comparative incidence of malignant growths at sites of origin other than the respiratory tract in smokers and nonsmokers. If a relationship between extrapulmonary neoplasms and cigarette smoking could be established, it might suggest that the association of tobacco usage and cancer is an indirect or even coincidental one. For this reason, the incidence of all malignant growths observed in men at necropsy was observed and tabulated according to the smoking habits of the entire group. The necropsy protocols of 993 men who died consecutively between 1958 and 1961 at the New York Veterans Administration Hospital were used. Statistical analysis revealed that carcinoma of the lungs was 4 times as common in heavy cigarette smokers as in nonsmokers or pipe and cigar smokers. The incidence of carcinoma of the upper respiratory tract and upper alimentary canal was 4 times as high in heavy cigarette smokers and in pipe and cigar smokers as in nonsmokers. The incidence of neoplasms in all parts of the body other than in the lung, larynx, pharynx, mouth, and esophagus was twice as high in nonsmokers as in heavy cigarette smokers. The total incidence of all varieties of malignant tumors at death did not vary greatly regardless of the smoking habits of any particular group of men. -- Am. Rev. Resp. Dis. Absts.

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