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Blood Studies in Chronic CO Asphyxia

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BLOOD STUDIES IN CHRONIC CO ASPHYXIA

MARIAN DAVIS AND ERMA SMITH

A closed circuit respiration apparatus was devised by means of which albino rats may be exposed to varying percentages of CO-air mixture and maintained in comfort for hourly intervals. The apparatus enclosed 31 liters of air. By trial and error it was found that addition of 0.31 per cent CO to this volume of air made a mixture just sub-lethal for adapted rats placed therein for one hour. Adaptation was brought about by gradually lengthening the daily exposure interval from an initial ten minutes on the first day to one hour in the course of about three weeks.

Blood studies. (a) Co saturation. The saturation of the hemoglobin with carbon monoxide was measured by the method of Sayers and Yant (1). The percentage saturation for different intervals from two minutes to one hour after one hour exposure will be presented. The saturation at death was about 85 per cent, which is the usual lethal saturation for pure CO.

(b) Coagulation time. The coagulation time was measured in gassed and control rats using the capillary method of Mills (2). Coagulation time appears to be unchanged by exposure to CO.

REFERENCES

1. SAYERS, R. R. AND W. P. YANT. U. S. Bureau of Mines Reports of Investigations, Serial No. 2476, 1923.
2. LEVINSON, S. A. AND R. P. MACFATE. Clinical Lab. Diag., 384, 1937.

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SOME PHASES OF WOUND HEALING IN AN INSECT (MELANOPLUS DIFFERENTIALIS)

GARTH JOHNSON

A study was made of the inflammatory processes and stages of repair following the production of wounds by incision and excision in the fifth abdominal sternite of both nymphs and adults. The following changes may be observed to take place: A clot is formed