

two in diminished oxygen (12% and 10%) and one in excess of oxygen (50%). The neurotics were more severely hampered in the diminished tensions of oxygen than the controls: about 70% collapsed in 10% oxygen whereas only 14% of the normal did. Extreme variations in pulse and blood-pressure took place previous to or accompanying collapse. The scores of the patients in the psychological tests in air compared with oxygen lack were poorer than the controls. They also failed to acclimatize to the diminished oxygen. The physiological symptoms were less marked in excess oxygen.

G. W. T. H. FLEMING.

*The Influence of Carbon Dioxide in Combating the Effect of Oxygen Deficiency on Psychic Processes, with Remarks on the Fundamental Relationship between Psychic and Physiologic Reactions.* (*Amer. Journ. Psychiat.*, vol. xciii, p. 1413, May, 1937.) Gellhorn, E.

The writer carried out experiments on 15 male students, æt. 20-27. They inhaled the gas mixture for 5 minutes from a Douglas bag and were then given 50 words from the Kent-Rosanoff test. In the first experiment they inhaled 8.5% oxygen, and in the second the same amount of oxygen, but in addition 3% carbon dioxide. The typical effect of oxygen deficiency on the association process consisted in the increased number of individual responses and the occurrence of perseverations and dissociations. When 3% carbon dioxide is added then symptoms completely disappear. Similarly with memory which appears to be most sensitive to oxygen deficiency. Severe changes in handwriting and misspelling occur in oxygen deficiency, and not when carbon dioxide is added. The time needed to carry out the number cancellation and addition tests is increased under oxygen lack, but no change occurs if under the same circumstances 3% carbon dioxide is added to the oxygen-deficient air-nitrogen mixture.

G. W. T. H. FLEMING.

*Surgical Treatment of Post-encephalitic Involuntary Movements of the Tongue.* (*Acta Psychiat. et Neur.*, vol. xii, p. 55, 1937.) Ingebrigtsen, B.

The writer describes a case with hyperkinetic movements of the tongue and facial muscles, in which the tongue was protruded as far as possible at intervals of seconds or minutes. The patient's speech was disconnected, dysarthric, and accompanied by an increased number of lingual movements. To cure this lingual condition the genioglossus muscle was loosened from its attachment on the mandible. It was found after the operation that the patient could not move his tongue forwards past his teeth. The involuntary movements in the right facial muscle decreased so as to be almost indiscernible. The right hand remained normally quiet and the speech became much improved. The patient himself noticed great improvement, and his previous strained and rather distressed facial expression was gone. Six months afterwards the improvement was still maintained, and the only disability the patient noticed was that it took him a little longer to chew his food than formerly.

G. W. T. H. FLEMING.

*A Clinical Study of the Effect of Benzedrine Therapy on Self-Absorbed Patients.* (*Psychiatric Quart.*, vol. x, p. 652, Oct., 1936.) Davidoff, E.

The writer investigated the action of benzedrine on a group of 30 patients. It accelerated the symptomatic improvement of 6. Of the 22 catatonics, only 3 showed noteworthy improvement from the standpoint of eligibility for parole. It increased motor activity in 15 cases; 6 of the 11 cataleptics showed improvement in the sphere of muscular control. It increased speech response in 13 cases and 3 of the 6 male patients began to talk. It had little effect on mood, except in organic cases. Thirteen cases showed improved general efficiency and better contact. Asthenics, cases with vasomotor instability, alcoholics and organic cases in general reacted more favourably and were more sensitive to the drug.

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