

Therapeutic Notes

The following therapeutic notes have been kindly collected for us by Dr. F. G. Allison of Winnipeg.

SULFATHIAZOLE POWDER FOR BEDSORES

Goodman and Corsaro (*Ohio State M. J.*, 1941, **37**: 956) report that five stubborn cases healed rapidly after daily application of sulfathiazole powder to the ulcer with a salt shaker. Carbon light was also used. This method has also been used with success on other types of ulcers, and sinuses.

HALITOSIS

Crohn and Drosd (*J. Am. M. Ass.*, 1941, **117**: 2242) state that halitosis not due to local causes responds to a low fat diet (50 grm. daily). The Chinese think all eaters of milk and butter smell like cows. Experiments were done on garlic. It was concluded that garlic is absorbed in the intestine and excreted in the liver bile for several days. During this time the odour of garlic is conveyed by the blood to the lungs, and thence by the expired air to innocent bystanders.

For immediate, if somewhat temporary, relief from garlic or onion breath, the method advocated in *J. Am. M. Ass.* (1935, **104**: 2162) may be followed. Half a five grain chloramine (chlorazine) tablet dissolved in an ounce of

water when used as a mouth wash destroys any essential oils in the mouth at the time. The abstracter can state from personal experience that a green onion flavour can be driven from the mouth if this mouth wash is used two-hourly.

EFFECT OF HEAT AND COLD ON ABDOMEN

Bisgard, Matson and Hirschmann (*J. Am. M. Ass.*, 1942, **118**: 447) found by experiment that external heat inhibited the activity of the stomach and intestines, thus proving its benefit in local inflammatory conditions like appendicitis. External cold applied to the abdominal wall increased the activity of the stomach and intestines and caused an increased flow of HCl. Thus an ice bag should not be used in hæmatemesis. Conversely, hot drinks increased the activity of the stomach and cold slightly inhibited its action.

SULFANILAMIDE IN ACUTE NEPHRITIS

Williams, Longcope and Janeway (*Am. J. M. Sc.*, 1942, **203**: 157) gave approximately 3 grm. of sulfanilamide daily to 42 patients with acute nephritis. After the acute stage 1.5 grm. was given daily until all evidence of the disease had disappeared. There was one death in the acute stage. Of 108 controls, twelve died in the acute stage. After two years 75% of the sulfanilamide patients and 52% of the controls were considered to have recovered completely.

Clinical and Laboratory Notes

UNTOWARD EFFECTS OF BROMIDE MEDICATION

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A survey of cases admitted to this hospital in the past five years has indicated an increase in the number of admissions diagnosed as psychoses due to bromide intoxication. Accordingly, a report on this aspect of psychiatric hospital practice is concluded to be justified. During the first one-half of the five year period no cases of bromide intoxication on admission, are recorded.

This Table shows the cases that have been admitted in the past 2½ years, and includes other interesting information about them. In all these cases there is conclusive evidence that it was the bromide psychosis which brought the patient to hospital and not an underlying psychosis which had been under bromide medication prior to admission. All cases presented a psychiatric problem for which the prescribed medication should have been helpful, providing the dose had been limited to an efficacious amount. Only three gave a history of mental

TABLE I.

Case	Date of admission	Age	Serum blood bromide content mg. per 100 c.c. immediately following admission	Presence of a psychiatric complaint	History of mental illness in other members of the family	Number of days treated in hospital
1	July 10/39	49	100	+	0	26
2	Feb. 1/40	37	140	+	+	46
3	Apr. 11/40	45	100	+	0	175
4	Apr. 13/40	52	225	+	0	56
5	May 3/40	36	180	+	0	49
6	June 1/41		200	+	0	49
7	July 7/41	49	310	+	0	61
8	Jan. 2/42	47	370	+	+	*
9	Jan. 15/42	38	300	+	+	*
10	Jan. 19/42	47	310	+	0	*

* Still in hospital.

illnesses in other members of the family, and so it is unlikely that heredity is a contributing factor in the development of these psychoses. The length of time in hospital compares approximately with the amount of bromide in the blood at the time of admission. Case 3 is an exception. He was an alcoholic who also took bromides and barbiturates. He had no interested relatives, and was suffering from a

compression fracture of a vertebra when admitted. Both these factors tended to keep him in hospital. He was the only case for whom the medication had not been prescribed. Bromism, or bromide poisoning, is popularly believed to be heralded by a rash. Although all cases had serious and persistent mental symptoms when admitted, none had a bromide rash.

A total of seventeen different mental symptoms were observed. The symptoms and frequency of occurrence are indicated below.

<i>Symptoms</i>	
Apathy.....	Present in all cases
Toxic delirium and confusion.....	Present in all cases
Disorientation.....	Present in all cases
Memory impairment.....	Present in all cases
Clouding of consciousness.....	Present in all cases
Auditory hallucinations.....	Present in 8 cases
Delusions of fear and apprehension..	Present in 8 cases
Emotional instability.....	Present in 6 cases
Visual hallucinations.....	Present in 6 cases
Misidentification.....	Present in 5 cases
Irritability.....	Present in 5 cases
Confabulation.....	Present in 4 cases
Violent tendencies.....	Present in 4 cases
Ideas of persecution.....	Present in 3 cases
Considered suicide.....	Present in 2 cases
Homicidal tendency.....	Present in 2 cases
Attempted suicide.....	1 case
Sensory hallucinations.....	1 case

The length of time necessary for the bromide to leave the blood is longer than might be expected. Sodium chloride may be administered orally with the expectancy that the chloride radical will replace and release the bromide

TABLE II.

<i>Date</i>	<i>Serum blood bromide content in mg. per 100 c.c.</i>
January 3, 1942.....	370
January 17, 1942.....	175
February 2, 1942.....	90
February 16, 1942.....	30
March 2, 1942.....	10

In normal times most people live and work at a pace which is well below their peak capacity, but in war time they may be asked to work near or at it for fairly lengthy periods and on occasion temporarily to surpass it—as appears to have been done after Dunkirk. In a recent issue of *War Medicine* Drs. F. A. Hellebrandt and P. V. Karpovitch discuss physical performance in connection with the administration of ergogenics and point out that whether their use is hazardous if the output of work is improved merely by eliminating fatigue is a matter whose solution is rendered difficult by the fact that it is far from easy to differentiate between the fatigue limits set by the body and those set by the mind. Whilst conceding that it may be wiser

radical for excretion. Table II illustrates the rate at which the bromide is excreted. This study was made on Case 8 in Table I and is representative in our experience of the rate of excretion in any case.

Bromides are a very useful medication and at this hospital have been used chiefly in conjunction with chloral hydrate in the following prescription:—

R Sod. bromide gr. xx
Chloral hydrate gr. x
Aqua ad. ʒ ii

ʒ ii t.i.d., for a period of five days, is well tolerated by most patients. Senile and arteriosclerotic persons have a low tolerance for bromide medication.

Chloral hydrate augments the action of the bromide and also may diminish its cumulative tendency. This medication is always prescribed for a definite period of time. Table III shows how rapidly serum blood bromide rises when this prescription is administered t.i.d.

TABLE III.

<i>Case</i>	<i>Number of days administered</i>	<i>Serum blood bromide content in mg. per 100 c.c.</i>
A	5	70
A	10	90
B	15	115
B	20	120

SUMMARY

The bromides are very useful drugs, but unless their cumulative action is guarded against serious results will occur. The serum blood bromide content rises quickly, but decreases slowly. Serious and persistent mental symptoms occurred in the above ten cases, but none had a bromide rash when admitted to hospital. Bearing these facts in mind, it would seem advisable to prescribe the drug in reasonable doses and for definitely limited periods of time only.

in war time to resort to an ergogenic than to abandon an exhausted individual they insist that any substance, the administration of which pushes a person past normal endurance, is potentially dangerous and should be strictly reserved for emergency use as in certain of the "life or death" exhaustion situations which not infrequently arise in war time. Of all ergogenic aids those which augment the work capacity simply by improving the condition of the body are obviously the safest and most physiologically sound; and the most enduring gain can probably be attained by careful systematic physical training and the achievement of the highest possible standard of physical fitness.—*J. Roy. Inst. of Pub. Health & Hyg.*, 1942, 5: 88.