

sac behind, so that poison continues to be injected for several seconds by muscular action. The sting should be removed first but not by picking it out. It should be scraped out with a finger nail or wiped out with a handkerchief. Often the victim, however, is too hopping mad to do either of these things.

For an excellent account of the treatment of bee-sting reactions the reader is referred to an article by Dr. A. W. Franklin.² There is a vast literature on bee venom and a full list of references is given in *Bee World*.³ The components of bee venom are described by N. B. Hodgson.⁴

REFERENCES

- ¹ *Brit. med. J.*, 1957, 2, 757.
- ² Franklin, A. W., *Bee World*, 1963, 44, 9.
- ³ *Ibid.*, 1961, 42, 233.
- ⁴ Hodgson, N. B., *ibid.*, 1955, 36, 217.

"Shostakovsky Balsam"

Q.—*What is the Russian drug "shostakovsky" which was reported in the press to be a treatment for peptic ulcer? Is it likely to be effective?*

A.—"Shostakovsky balsam" is a synthetic substance prepared in the Institute of Organic Chemistry of the U.S.S.R. Academy of Sciences by Professor M. F. Shostakovsky. It was developed largely as a result of the considerable demand in the Soviet Union for balsam of Peru for medicinal purposes. Shostakovsky balsam is a polymer of vinyl-butyl ether and is a thick, yellow, viscous liquid which is insoluble in water but soluble in alcohols and in both mineral and vegetable oils. It is non-volatile and is stable at ordinary temperatures. It is claimed to be non-irritant to the tissues and to have antiseptic properties. It has been used in the Soviet Union since 1944 mainly as a dressing for wounds, burns, and ulcers and as a local application for various skin conditions. It is also claimed that it is of value in the treatment of peptic ulcer. The dose recommended is one to two dessertspoonfuls a day for 15 to 20 days. The data at present available do not provide convincing evidence that it has any real therapeutic value. It must be a particularly nauseating substance to take, and one can understand the comment of a distinguished patient who said, "I think it frightens the ulcer into submission."

Ionized Calcium in Plasma

Q.—*Ionized calcium (Ca^{++}) is found in higher concentration in the plasma than the maximum possible in pure water. This is believed to be the effect of parathormone. I have been able to find no proof of this statement. Does it hold true *in vitro* for plasma from parathyroidectomized animals or humans?*

A.—The statement about ionized calcium being found in higher concentration in the body fluids than is possible in distilled water and the conjecture that this is perhaps due to the effect of parathormone are quoted from Wright's

Applied Physiology.¹ The statement is derived from the results of Greenwald and Gross^{2,3} and from those of Hastings, Murray, and Sendroy,⁴ who found evidence that the parathyroid hormone may act like citrate in preventing the precipitation of calcium salts. However, they could find no evidence that the serum of parathyroidectomized animals was unable to hold as much Ca^{++} as normal serum, which answers the question. Schmidt and Greenberg⁵ proposed that "the first views that the parathyroid hormone caused the elaboration of a citrate-like compound—maintaining the level of calcium concentration in the plasma by increasing its solubility—will have to be abandoned." The point of view expressed in Wright's *Applied Physiology* was first put forward in the 5th edition; it is deleted in the 11th edition, which is in preparation.

REFERENCES

- ¹ Wright, Samson, *Applied Physiology*, 1961, 10th ed., rev. by Cyril A. Keele and Eric Neil with the collaboration of John B. Jepson. Oxford University Press, London.
- ² Greenwald, I., and Gross, J., *J. biol. Chem.*, 1925, 66, 217.
- ³ — *ibid.*, 1929, 82, 505, 531.
- ⁴ Hastings, A. B., Murray, C. D., and Sendroy, J., jun., *J. biol. Chem.*, 1927, 71, 723.
- ⁵ Schmidt, C. L. A., and Greenberg, D. M., *Physiol. Rev.*, 1935, 15, 297.

Withholding Iron During Periods

Q.—*It has been stated¹ that in the treatment of menorrhagia iron should be given only between periods, since it sometimes increases the loss if given during the period. Does this view still hold good, and for all types of iron administration?*

A.—The answer to the question is that this view still holds good. The relevant word in the question is that iron "sometimes" increases the loss. It is for this reason that, as a general guide, practitioners are advised not to prescribe oral iron during the menstrual period. There are many women who can take iron in this form without it increasing the amount of the loss, but on the other hand a sufficient number are adversely affected to make it wiser to withhold the iron during the days of the menstrual flow. Intramuscular or intravenous iron does not have the same effect.

REFERENCE

- ¹ Stallworthy, J. A., *Brit. med. J.*, 1950, 1, 831.

Infectivity of G.P.I. Patient's C.S.F.

Q.—*What are the dangers, if any, in performing a lumbar puncture on a patient with G.P.I. the C.S.F. should get into an abrasion on the hand? Should anything be done if this has happened?*

A.—The dangers are really negligible. There have been occasional reports of finding *Treponema pallidum* in the cerebrospinal fluid in cases of late neurosyphilis, but if they occur at all their numbers are likely to be so few that infectivity is almost non-existent. In the circumstances described no anti-

biotics or other anti-syphilitic remedies should be given. The physician at risk should remain under observation with blood tests at monthly intervals, with the main purpose of relieving anxiety. If blood tests are negative after three months full reassurance can be given and no further action is necessary.

Congenital Adrenal Hyperplasia

Q.—*A healthy young woman in her twenties gave birth to a son found later to be suffering from congenital adrenal hyperplasia of the salt-losing type. He is now nearly 4 years old and is well on steroids and a salt supplement. The mother was advised not to have any more children lest she should have a daughter who might suffer from a similar complaint with masculinization. What are the chances of this?*

A.—The affected child is homozygous for a recessive gene. The chances of this condition recurring in any later child are one in four. If the affected child were a girl she would probably show some degree of masculinization. The total risk, therefore, of a female pseudohermaphrodite is one in eight. It should be added that girls affected in this way can be treated with great success by plastic surgery and steroid therapy.

NOTES AND COMMENTS

Treatment of Lightning Pains.—Dr.

BRAHAM (Israel) writes: In your reply to my question on this subject ("Any Questions?" June 15, p. 1595) no mention was made of the use of phenytoin (diphenylhydantoin). In an article¹ on the treatment of trigeminal and other neuralgias by phenytoin reference was made to two tabetic patients afflicted with severe lightning pains who responded well, and even dramatically, to this therapy. A short time later further cases were reported,² again with remarkable relief. The drug is given in doses of 100 mg. three times daily, and improvement may be expected within 48 hours. Cessation of treatment results in return of pain within a similar period.

OUR EXPERT replies: The lightning pains of tabes dorsalis come and go in unpredictable fashion and their severity is liable to great variation. The four cases described in the articles which Dr. Braham quotes are interesting, but it is impossible on the evidence to exclude coincidence or placebo response. The value of this drug could be determined only by a double-blind trial in a series of cases.

REFERENCES

- ¹ Braham, J., and Saia, A., *Lancet*, 1960, 2, 89.
- ² Green, J. B., *Neurology (Minneapolis)*, 1961, 257.

Corrections

In the leading article on "Post-operative Venous Thrombosis" (July 6, p. 3) the paper by N. M. Gibbs referred to on p. 3, col. 1, was in *Brit. J. Surg.*, 1959, 47, 28, not as cited in the footnotes on p. 3.

The title of the medical memorandum by Dr. Bertram Mann and Dr. F. W. Oliver (July 20, page 161) should have read "Temporary Survival After Ventricular Fibrillation," not "Temporary Survival After Fairly Early Ventricular Fibrillation." We much regret this error.