Medical Memoranda

Ineffectiveness of Sulphapyridine and Successful Action of Sulphadiazine in a Case of Puerperal Fever

The following case is considered worth reporting, as one illustrating the comparative action of sulphapyridine and sulphadiazine in puerperal fever.

Mrs. P., a primipara aged 19, was delivered on Sept. 21, 1944, after a moderately prolonged labour; low forceps were used and episiotomy was performed under trileine anaesthesia. The infant weighed 10 lb. There was a slight rise of temperature to 99° during the first two days of the puerperium. On Sept. 26 the temperature suddenly rose to 104.6°, the patient developed rigors, suppression of lochia, and a pulse of 140, and felt very ill. Sulphapyridine orally was started at 6 p.m. the same day: 2 g. followed in 4 hours by 2 g., and afterwards 1 g. every 4 hours. The temperature on the 27th was 102.4° in the morning and 104° in the evening. On the 28th the morning temperature was 102.8°, evening 104°; two intramuscular injections of sulphapyridine were given at 1 p.m. and 7 p.m. on the same day in addition to the oral doses. Bacteriological examination of the blood showed that the causative organism was a haemolytic streptococcus. The morning temperature on Sept. 29 was 102.4° and the pulse 120. At 10 a.m. the sulphapyridine was stopped and 4 g. of sulphadiazine was given—2 g. at 2 p.m. and 2 g. at 6 p.m.—followed by 1½ g. every 4 hours until the evening of Sept. 30, and then 1 g. every 4 hours until Oct. 2. At 7 p.m. on Sept. 29 the temperature dropped to 101.6° and pulse to 120; lochia reappeared and the patient said that she felt much better. On Sept. 30 the morning temperature was 99°, pulse 110; evening temperature 98°, pulse 104. The respective temperatures on Oct. 1 were 97° and 98.4°; on Oct. 2, 96° and 96°; pulse normal. Sulphadiazine was stopped and the patient made an uneventful recovery.

COMMENT

Although the patient received large and regular doses of sulphapyridine orally and intramuscularly for 3 days, the infection showed no signs of regressing. Within less than 24 hours of starting sulphadiazine therapy there was a marked subjective and objective improvement in the patient's clinical condition with rapid resolution of the infection. The ineffectiveness of sulphapyridine in this case agrees with the experience of Dr. M. Kalisova in her recorded case of acute appendicitis (*British Medical Journal*, 1944, 2, 597) in which penicillin was used after the failure of sulphapyridine to control the infection.

This seems to prove the superiority of sulphadiazine over sulphapyridine in combating streptococcal infections.

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Nitrobenzene Poisoning from Furniture Cream

In view of the rarity of poisoning by nitrobenzene, we feel that the following case is of interest.

A man aged 45, who had been in the habit of taking an alkaline mixture, swallowed by mistake a quantity of furniture cream at about 8.30 one morning. He vomited about half an hour later; but as he felt ill he sent for a doctor, who saw him at 9.30 a.m. When seen he showed no sign of any untoward effect from his misjudgment. Later in the day he became drowsy, and when seen again by one of us (C. G. F.) at about 3 p.m. he presented a typical picture of methaemoglobinemia, with marked cyanosis of the lips and conjunctivae.

He was admitted to hospital about half an hour later. His condition then was poor; he was semi-conscious, very cyanosed, and the pulse was thready. His stomach was washed out, a certain amount of the furniture cream being returned. He was then given 3 gr. of calomel. His condition steadily deteriorated, but we unfortunately were still unable to account for this. We then consulted our local chemist, Mr. T. N. Hitchings, who fortunately suggested the possibility of the presence of a benzene derivative in the furniture cream. On further reference, the identical symptoms were described as following poisoning by nitrobenzene. At about 10 p.m. he was given three pints of Group O blood, and about three pints was withdrawn. His condition gradually became better, full consciousness was regained, and his pulse improved. He made an uninterrupted recovery.

We have since learned from the makers of the furniture cream that the nitrobenzene content is from 4 to 5%. We conclude that the dose of nitrobenzene he had swallowed would have been about 15 minims, which we believe can be lethal.

We have since made contact with the makers and have suggested that, in view of the poisonous nature of the substance, it would be wise to market it in a distinctive bottle, suitably labelled.

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Reviews

NUTRITIONAL KNOWLEDGE FOR RELIEF WORKERS

Nutrition and Relief Work. A Handbook for the Guidance of Relief Workers. (Pp. 111. 5s.) Published by the Council of British Societies for Relief Abroad in association with the Oxford University Press. 1945.

This book is intended to supply relief workers with the theoretical knowledge by which their activities should be guided and the practical instruction that will enable them to overcome the difficulties they will meet in the field. It begins with an account of the composition of food and the purposes for which the constituents of food are used in the body. This is very clear and written in non-technical language, and is followed by a discussion of the effects of undernutrition. It is welcome that this stresses the fact that partial starvation is not invariably accompanied by specific deficiency diseases; that the long extraction of flour and abundant consumption of vegetables, prevalent on the Continent, lessen the danger of such diseases.

Here will be found instruction on the conduct of surveys of the food consumption and of the nutritional state of populations, with examples of forms for use in such surveys. In order that relief workers may not offend against local tastes, customs, and prejudices, an account is given of food habits prevalent in various parts of Europe. A table shows the consumption per head of population, of various foodstuffs, in 16 countries before the war, in 1942-3, and in 1943-4. A chapter on classification and composition of food contains a table showing the calories, protein, fat, carbohydrate, calcium, iron, vitamins A, B₁, C, riboflavin, and nicotinic acid in the edible portions of foodstuffs, as purchased retail. There are also notes on the types of foodstuffs—for example, the composition of flour—now eaten in certain European countries.

Extremely valuable information is given about the handling and storage of foodstuffs. For example, there are full instructions about the storage of flour, whether white flour, high-extraction flour, or flour from mixed cereal grains; the ways of using dehydrated foodstuffs are described. The last chapter deals with various types of improvised equipment for cooking food. Finally there are appendices giving European currencies, weights, and measures, and an English-French-German glossary of words relating to food and cooking.

It is a remarkable achievement to have condensed so much information into a book of 111 pages. It is obvious that the authors possess first-hand knowledge of the matters with which they deal. Though the book is intended for intelligent amateurs, there are few among those who could be classed as professionals who would not find it valuable. The table of composition of foodstuffs, for example, contains information which is not collected in any other publication.

A TEXTBOOK OF MOSQUITO CONTROL

Mosquito Control. Practical Methods for Abatement of Disease Vectors and Pests. By William Brodbeck Herms, Sc.D., and Harold Farnsworth Gray. Second edition, revised and enlarged. (Pp. 419; illustrated. \$3.50 or 20s.) New York: The Commonwealth Fund; London: Oxford University Press. 1944.

In the fight against malaria and yellow fever mosquito control is no longer a somewhat academic and experimental issue but is increasingly becoming a well-recognized special branch of public health work. An indication of the strides made in this direction and the highly developed techniques now employed will be apparent from study of the second edition of Herms and Gray's *Mosquito Control*. This very useful and attractive volume is without doubt the most complete account yet published dealing with the practical aspects of mosquito control as a public health measure. A notice of the first edition will be found in our issue of Jan. 18, 1941. The present edition follows in general the lines of the first, of which there have been three reprintings, but, as the authors note in their preface, the rapid development of new techniques of mosquito control in the past three years has made a thorough revision and enlargement of the book advisable to make it more applicable to the requirements of our military Forces