

vention, study and cure of tuberculosis, as well as some of the state boards of health, print most valuable little tracts of effective educative character which may be easily obtained.

To the overworked business or professional man who finds, often too late, that health outweighs all other blessings, I am in the habit of recommending one of the following books: "Making Life Worth While,"¹⁸ "Efficient Life,"¹⁹ "Mind and Work"²⁰ or "Instinct and Health."²¹ The two books "How to Live on Twenty-Four Hours a Day"²² and "Mental Efficiency,"²³ by Arnold Bennett, who is a novelist and not a physician, contain much good advice.

The many editions of Sir Henry Thompson's book on "Diet in Relation to Age and Activity,"²⁴ show the interests of many people in such subjects. He gives hints concerning habits conducive to longevity, discusses alcohol and the evils of improper feeding, overfeeding in middle life, value of a light diet for brain workers, simplicity in diet, prevention of corpulence, etc.

There are many books which can be safely recommended to the mother or nurse to guide and instruct her in the management of infants or children; I mention only two: "The Care and Feeding of Children," by L. Emmett Holt, is an excellent manual arranged in the form of a catechism and should be prescribed for every new mother; "The Care of the Baby,"²⁵ by J. P. Crozer Griffith is also recommended.

Let the self-medicating patient or the victim of quacks, mental healers, clairvoyants, etc., read from "The Great American Fraud,"²⁷ by Samuel Hopkins Adams, or from "Nostrums and Quackery,"²⁸ two books which should be on the waiting-room table in every physician's office; the former appeared first as a series of articles in *Collier's Weekly*.

In selected cases, to patients with syphilis or gonorrhoea, especially to those contemplating marriage, we may recommend such books as "Social Diseases and Marriage,"²⁹ by Prince A. Morrow, and "Health and Disease in Relation to Marriage,"³⁰ by Senator and Kammer. As the personal propagandism of the physician is to-day the most effective agency of society in the prevention of venereal disease, such books in the hands of intelligent patients can do much good.

For "shut-in" patients or hopeless cases with incurable diseases, there is much literature of an optimistic character which may prove of great therapeutic value. It is a well-known fact that patients with incurable diseases usually have engrafted on their organic symptoms a multitude of psychic symptoms which are often relieved by suggestion; the removal of these secondary symptoms explain the temporary results often obtained by the cults and healers. Osler mentions a case in which a patient with far advanced cancer of the stomach improved

greatly and gained 10 pounds in weight after the visit of a consultant who promised a cure. For these hopeless cases much mental comfort may be obtained by reading one or more of the above-mentioned books.

Many of the books mentioned in this paper take up a variety of subjects such as diet and diet delusions, exercise, clothing, baths, tobacco, alcohol, habits of work and play, mental hygiene, fads, etc., and even physicians would derive much information from reading them. I do not attempt to enumerate the many popular books on diet, sex hygiene, sex education, etc., but have confined myself to the more practical and more urgent needs of the every-day patient.

I could report the histories of a considerable number of patients who had been the "rounds," and had "suffered much of many physicians," to whom I have recommended some good book from this "five-foot shelf" of therapeutic literature, and which was the means of their awakening — making them laugh at themselves, and at their fears and follies and stopping their demands for a medicine for every symptom.

In conclusion I wish to say that the medical profession is largely responsible for the wide-spread prevalence of cults and bizarre methods of healing; physicians have been prevented by a false sense of the dignity and mystery of medicine from doing their share in educating the public and the individual patient to distinguish sham and pretense from truth and science, and the American Medical Association, through its Committee on Propaganda for Reform can do no better work than to collate for the benefit of both the public and the medical profession such literature as I have attempted in a general way to outline.

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THE USE OF HEXAMETHYLENAMIN IN THE AFFECTIONS OF THE UPPER RESPIRATORY TRACT

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At the time I read Dr. Barton's article on "The Elimination of Hexamethylenamin by the Mucous Membrane of the Middle Ear,"¹ together with report of a case of suppurative otitis media, I thought of the desirability of testing the effects of the drug in other conditions characterized by presence of a discharge; but at that time I was a student in a medical school and, lacking both the time and clinical opportunity to do so, soon forgot it.

On reading Dr. Vanderhoof's article,² however, my interest in the subject was revived, and having this time both the time and the opportunity, I decided to test the efficiency of the drug, generally following Dr. Vanderhoof's suggestions as to the dosage and frequency of administration. I also decided to extend the scope of Dr. Vanderhoof's observations, including cases other than bronchitis. My clinical opportunity was very good, most of my cases being school children and employes in the Lower Brule Indian School, thus making it possible for me to be sure at all times that the drug was administered as prescribed, as well as enabling me to see the patients at the earliest moment possible and to observe them as frequently as I desired.

1. Barton, W. M.: THE JOURNAL A. M. A., March 12, 1910, p. 871.

2. Vanderhoof, Douglas: THE JOURNAL A. M. A., Feb. 3, 1912, p. 333.

18. Fisher, H. W.: Making Life Worth While, Doubleday, Page and Company, New York.

19. Gulick, Luther: Efficient Life, Doubleday, Page and Company, New York.

20. Gulick, Luther: Mind and Work, Doubleday, Page and Company, New York.

21. Hutchinson, Woods: Instinct and Health, Dodd, Mead and Company, New York.

22. Bennett, Arnold: How to Live on Twenty-Four Hours a Day, George H. Doran Company, New York.

23. Bennett, Arnold: Mental Efficiency, George H. Doran Company, New York.

24. Thompson, Henry: Diet in Relation to Age and Activity, Frederick Warne and Company, London.

25. Griffith, J. P. Crozer: The Care of the Baby, W. B. Saunders, Philadelphia.

27. Adams, Samuel Hopkins: The Great American Fraud, A. M. A. Press, Chicago.

28. Nostrums and Quackery, A. M. A. Press, Chicago.

29. Morrow, Prince A.: Social Diseases and Marriage, Lea Brothers and Company, New York.

30. Senator and Kammer: Health and Disease in Relation to Marriage, The Reiman Company, New York.

I have used hexamethylenamin in forty-three cases, of which twenty-two were cases of acute bronchitis, twelve of acute rhinitis, eight of influenza and one of chronic frontal sinusitis. While I am fully aware of the fact that an observation of so limited a number of cases as the one here offered is not convincing, I nevertheless hope that as a corroboration of Dr. Vanderhoof's statements, and as a supplement to the cases reported by him and Drs. Miller³ and Hexmuller,⁴ this article may be of some interest.

I. HEXAMETHYLENAMIN IN ACUTE RHINITIS

Daily routine inspection of the school children is responsible for the fact that practically every case of rhinitis reported here was put under treatment within less than twenty-four hours after the onset, i. e., before a free secretion had been established. At that time the only complaints were slight headache and "stiffness" in the nose; every patient observed was kept indoors for a day or two, was given 1 grain calomel and soda (in $\frac{1}{4}$ -grain doses, every fifteen minutes), and six hours later was given two teaspoonfuls of magnesium sulphate. Hexamethylenamin was administered as follows: Children 10 years old received 0.3 gm. ($\frac{1}{4}$ grains) dissolved in half a glass of water, three times a day during the first day, and twice a day during the following day or two. Two boys of 15 and over received 0.4 gm. (6 grains) dissolved in a full glass of water, while two adults were given 0.7 gm. (10 grains) in the same way. Only two patients required further administration of hexamethylenamin, which was given in half of the original dose, twice a day for two more days. No other treatment of any kind was given, nor was the diet restricted in any way, except that milk was withdrawn during the day on which calomel was given. The results were as follows: Of the eight cases which were seen before the secretion had been established, six developed a scanty discharge on the following day, which disappeared completely on the third day; of the other four cases (which were first seen after the secretion had just been established) two cases developed a moderately free and two a profuse discharge on the following day, which disappeared on the fourth day; in almost all cases the sensation of "stiffness" and headache were relieved on the day following the initial administration of hexamethylenamin, and none of the patients developed any complications, such as sinusitis, laryngitis or — by far the commonest — bronchitis.

II. HEXAMETHYLENAMIN IN ACUTE BRONCHITIS

In the twenty-two cases of acute bronchitis, seventeen patients, when first seen, complained of a slight but irritating cough which caused a "raw" feeling under the sternum, some malaise and other general symptoms of the disease; the other five patients were first seen when the cough was somewhat "loose," the expectoration being serous or seromucous, but not purulent. In fourteen cases there were heard on auscultation shifting sibilant and sonorous râles, while in the other eight both the sibilant and crepitant and subcrepitant râles were present; in six cases rhonchal fremitus was present on palpation; temperature ranged between 99.5 and 102 F. In four cases acute laryngitis was present at the time of the first visit. The treatment consisted of keeping the patients in bed as long as temperature stayed above the normal, excluding meats and pastry from the diet, securing as perfect a ventilation as possible, giving calomel

and soda, and magnesium sulphate, as described above, and administering hexamethylenamin as follows: Full doses, 0.7 gm. (10 grains) for the adults and corresponding doses for children, were given three times a day for three days, twice a day until the cough subsided, then half doses twice a day for three more days. No other treatment was given except in those cases in which acute laryngitis was present; here inhalations of medicated steam were given every four hours (a teaspoonful of compound tincture of benzoin to a pint of water). The results were very good indeed; every patient was well within from four to five days; free secretion was promptly established with great relief to cough, temperature became normal on the second or third day, and all other coexistent symptoms subsided within three days. The only difference in the effect of hexamethylenamin given in acute bronchitis and given in acute rhinitis was that the bronchial secretion was much more abundant in the former than the nasal in the latter; why this should be so, or whether this was purely incidental, I cannot say.

III. HEXAMETHYLENAMIN IN INFLUENZA

All of the eight cases of influenza were of the respiratory type, and were characterized by great prostration. Temperature ranged from 100.7 to 105.2 F. at the time of the first visit. The routine hygienic and dietetic treatment was instituted, while the medicinal treatment consisted of a mild purge, moderate doses of acetphenetidin for pain, and hexamethylenamin administered in full doses three times a day until temperature stayed below 100 F. and general symptoms were much improved; then half doses three times a day until temperature became and stayed normal, and then one-third of the original dose was given three times a day for a week. All patients were well within from five to seven days, with no complications following; the symptoms referable to the respiratory system were manifestly improved within from three to four days. No untoward symptoms which might be ascribed to the use of hexamethylenamin were observed.

IV. HEXAMETHYLENAMIN IN CHRONIC FRONTAL SINUSITIS

This was a very interesting case. An adult Indian came to me for the first time on Feb. 9, 1912, complaining of a "catarrh in the head and nose"; he said that ordinarily he was not suffering much, but every time he had an attack of acute rhinitis he would have a very severe pain at the root of the nose and around the right eye — an obvious exacerbation of the chronic frontal sinusitis. I prescribed for him hexamethylenamin, 0.3 gm. three times a day, and told him to take it for a month. He came back to my office, six weeks later, and though he did not feel any better, he was delighted with the fact that while a week ago he had suffered from an attack of acute rhinitis, he was for the first time in the last six years absolutely free of any pain or any other symptom referable to the presence of sinusitis.

CONCLUSIONS

1. Hexamethylenamin is a valuable remedy in the treatment of the inflammatory conditions of the upper respiratory tract.
2. It must be given in doses large enough to secure its full physiologic effects.
3. No untoward symptoms were observed while given in fairly large doses (up to 30 grains daily).
4. It seems to prevent possible complications of acute rhinitis, such as bronchitis and sinusitis.

3. THE JOURNAL A. M. A., April 9, 1910, p. 1222.
4. THE JOURNAL A. M. A., June 10, 1911, p. 718.