

Oxygen Gas as a Vermifuge

By

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Intestinal worms seem always to have been our companions. They live among the folds of our intestines steadily feeding themselves by preying on our food. Their existence in our body and our attempts to eliminate them date back to antiquity.

Many remedies are used as vermifuges, such as oil of chenopodium, santonin, carbon tetrachloride, and diethyl-carbamazine ("Hetrazan"), which is a recent anthelmintic. These drugs are generally administered to the patients with the full knowledge of their concomitant after-effects, such as, nausea, vomiting, giddiness and sometimes damage to liver. But, inspite of all these complications, these drugs are considerably effective in expelling intestinal parasites. Round-worm known technically as *ascaris lumbricoides*, is a very common infestation known to human beings. Santonin was the only drug which a doctor would generally prescribe for elimination of round-worm infestation. Just as every drug has its advantages and disadvantages, santonin has

both. It has the advantage of being easily administered; its disadvantages are: (1) it is a fairly costly drug; (2) it has side effects; (3) it requires a purgative to expel the worms, and (4) 15 days must lapse between doses.

We were interested when our Chief Physician started using intra-gastric oxygen gas as a vermifuge.

Administration of gas

Preparation of the patient: (1) The patient is starved over night; (2) simple enema is given at 5 a.m. on the day of therapy; (3) a Ryle's tube is passed into the stomach of the patient at 8 a.m.; (4) the reaction of the aspirated juice is tested with litmus, to make sure that the end of the tube is in stomach.

The reaction should be acidic; (5) temperature, pulse and respiration are recorded.



Patient undergoing treatment.

Administration of oxygen gas is done with a Davidson Pneumothorax apparatus: (1) the rate of delivery adjusted to 100 c.c. of oxygen gas per 15-40 seconds; (2) 1,000 c.c. of oxygen is given to adults; (3) temperature, pulse and respiration are recorded hourly for 6 hours after the therapy; (4) food is given at usual time; (5) no purgative is used.

Effects on the patients.

Some patients had distension, nausea, eructation, and desire to pass a stool; otherwise most of the patients were comfortable. There were no late effects on the patients.

Effects on the worms.

The worms were passed generally next day, sometimes on the same day, rarely after the 5th day. The number of worms varied from 1-10; many of them were dead when passed; a very few were living at the time of expulsion.

Total cases seen by us were 31, of which 20 patients passed the worms.

There were no effects on pulse except in two patients who had increase in pulse rate after two hours.

This method was first quoted by a Russian Professor named Talyzin*. This method gives rise to no toxic after effects and it is cheap. The patient's co-operation is most essential. Passing of the stomach tube is disliked by some patients and tact is required by the nurse who has to pass it.

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Reference.

* Talyzin, F. F. The Oxygen Treatment of Roundworms, *Lancet*, 2: 314-315, August 14, 1954.

What have you done and what can you do To Protect Staff and Student Nurses against Tuberculosis ?

By

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Since its inception, the Sub-Committee on Tuberculosis Nursing of the Trained Nurses Association of India, has emphasized the importance of protecting students and staff against tuberculosis. Never has such scientific knowledge and resources for protection against tuberculosis been available as it is today. Needless to say that nurses and doctors are a most vulnerable group as they are constantly exposed to patients suffering from

undiagnosed tuberculosis. Studies have shown that about 2 per cent. of patients admitted to medical, surgical, obstetrical and other general hospital wards, are suffering from undiagnosed tuberculosis as well as the condition for which they were admitted. These patients are the reservoir of infection in the general hospital ward and they present a constant danger to all members of the hospital staff.

The health of staff and students is