efficient treatment of mild cases is of great importance, not only during the immediate attack but also at the first sign of any recurrence.

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Liquid Paraffin Eye Instillations

Q.—*Is instillation of liquid paraffin in the eye free from carcinogenic risk?*

A.—I know no instance of carcinoma of the eyes and their adnexa which could reasonably be attributed to the use of liquid paraffin. This substance is a most useful lubricant in cases of corneal abrasion and after certain chemical injuries in which there is a tendency for the hind surface of the eyelid to adhere to the eyeball. If liquid paraffin is used every day in an eye for long periods it may lead to irritation and discomfort, because the oily film is apt to interfere with the metabolism of the superficial cells. In other respects liquid paraffin is harmless to the eyes.

Oral Hormones for Menstrual Disorders

Q.—*What is Swyer's regime in the treatment of menorrhagia? What is the latest opinion on its efficacy?*

A.—In a paper entitled "Oral Hormonal Therapy for Menstrual Disorders," Swyer[1] described a regime for the treatment of prolonged and irregular uterine bleeding, modified from a plan originally published by Hamblen.[2] The treatment is in three phases: (1) arrest of bleeding; (2) cycle regulation; and (3) induction of ovulation.

Arrest of Bleeding.—This can usually be achieved with oral oestrogen. Stilboestrol 2–5 mg. or ethinyl oestradiol 0.1–0.2 mg. daily generally stops the bleeding within 24 hours. If it does not, the dose is doubled. The main difficulty which may be encountered is nausea and vomiting from the high oestrogen dose.

Cycle Regulation.—The oestrogen course is continued at undiminished dosage for 20 days. If bleeding recommences before the end of the 20-day course, treatment is stopped for five days and then a new oestrogen course is begun. An oestrogen withdrawal bleeeding begins usually within a week of stopping the treatment. Another 20-day oestrogen course (stilboestrol 2 mg. or ethinyl oestradiol 0.1 mg. daily) is begun on the 5th day of the new cycle. A third follows on from the 5th day of the next cycle.

Induction of Ovulation.—The 4th cycle of treatment begins as for the previous cycles. Ethisterone 40 mg. daily is given for 10 days from the 15th day of this cycle (that is, the last 10 of the 20-day oestrogen course). In the 5th cycle, the daily oestrogen dose is halved and the ethisterone dose, given again during the last 10 of the 20-day oestrogen course, is increased to 60 mg. In the 6th and final cycle of treatment the oestrogen dose is again halved and the ethisterone dose increased to 80 mg. (The ethisterone doses advised in the original publication were 20, 40, and 60 mg. daily; subsequent experience has shown that the higher dosage is preferable in some patients.)

In his paper Swyer described the results of the above treatment in a group of 19 patients with prolonged and excessive irregular uterine bleeding as "encouraging." There were 2 failures, "satisfactory" results in 10, and "excellent" ones in 7. Ovulation after treatment was known to have occurred in 8. There do not appear to have been any subsequent publications of other workers' experiences of this regime, but the impression one gains is that it often produces successful results. However, since these patients obviously have menstrual rhythms which are more or less unstable, it is not surprising that relapses, even after apparently "successful" treatment, are not uncommon.

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NOTES AND COMMENTS

Hydrogen Peroxide and Cancer Therapy.—Drs. G. WISEMAN and F. N. GHADIALLY (Sheffield, 10) write: The results of some experiments we have just concluded bear on the controversy going on at the moment between your expert and Dr. R. A. Holman ("Notes and Comments," February 15, p. 414). These results will be published in detail in due course, but we would like briefly to mention the main points here. We have tried the effect of orally administered H_2O_2 in the dose recommended by Holman[1] on rats bearing the Walker carcinoma or RD_3 sarcoma. The results of our experiments fail to confirm the findings of Holman. In common with Green and Westrop,[2] we find no evidence to suggest that H_2O_2 increases the survival time of rats bearing either of the above tumours. The survival times were as follows: (1) Walker carcinoma (experiment 1) treated with hydrogen peroxide, 25.8 ± 8.5 days; controls 26.7 ± 4.0 days; (2) Walker carcinoma (experiment 2) treated with hydrogen peroxide, 20.1 ± 3.4 days; controls 21.9 ± 4.2 days; (3) RD_3 sarcoma treated with hydrogen peroxide, 37.6 ± 34.3 days; controls 34.6 ± 25.0 days. Though hydrogen peroxide failed to prolong significantly the survival time of our tumour-bearing rats, it was noted that the final tumour weight in hydrogen-peroxide-fed animals tended to be slightly lower than in the experimental animals. Indeed, in one experiment it reached a statistically significant level. However, we feel that this is a non-specific effect due to decreased food intake. In any experiment designed to reveal inhibition of tumour growth the nutritional status of the animals must be taken into consideration,[3,4] for, as is now well known, anything that produces a loss in body weight—e.g., caloric restriction, anorexia, metabolic changes, etc.—will tend adversely to affect the rate of growth of tumours. Although transplanted tumours are less sensitive to dietetic restriction than naturally occurring or carcinogen-induced tumours, nevertheless this factor is important enough to merit consideration if errors of interpretation are to be avoided. The effect of hydrogen peroxide on the weight and food consumption of normal non-tumorous rats over a period of 57 days showed that the animals receiving hydrogen peroxide consumed less food and there was retardation of normal growth. In view of this finding, we feel that the slight reduction of tumour weight seen in our hydrogen-peroxide-fed animals is almost certainly explicable on the basis of the nutritional status of the animals.

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Corrections.—In his article on carbutamide in treatment of schizophrenia (*Journal*, February 15, p. 381) Dr. I. Frost acknowledged the advice given by Dr. A. Grunbaum. This should have read ". . . advice given by Dr. A. Grunberg."

In Dr. W. H. J. Cole's letter on buthalitone sodium (*Journal*, March 1, p. 522) the reference to "stage 1" in line 23 should have read "plane 1, stage 3."

Disclaimer.—Dr. ALEXANDER WILSON WATT, of 59, The Drive, Hove, wishes it to be known that he is not the Dr. Alexander Watt who, according to newspaper reports, recently gave evidence in the Worthing magistrates' court concerning information obtained from a police constable who was under the influence of a "mildly anaesthetic drug."

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