who eat four times a day) is the thing that will break the vicious circle.

At the onset this diet will be difficult for the ulcer patient who is inclined to eat a bite at all hours of the day to stop the hunger pain and silence the stomach. As a concession, in the beginning, 1 cup of milk at 6 p.m. may have to be allowed him.

In my experience, the foregoing diet of 2 meals a day, which may be called "part-time daily fasting," is ample to maintain the normal weight (170 lbs.) of a man doing light work (hospital rounds or operations) in the morning and office work in the afternoon. Whether it would be sufficient or would have to be modified for manual workers is a question that would require further study.

It may take several weeks for any one to accustom himself to this regimen. If the plan works the patient will notice two things: (1) that he will soon be able to sleep through the night without pain and without drugs, (2) the next day he will miss his familiar attendants of many years, the hunger pain in the late morning and late afternoon; this will be very slight or absent entirely.

Will a duodenal ulcer heal under this treatment? I doubt it; this lesion in its intractable form seems to defy any therapy. With the constant irritation and caustic action of the hydrochloric acid withdrawn during the greater part of the time, however, the ulcer may have a chance to recede, as evidenced by improvement in the symptoms.

It remains to be seen how patients will take to such a rigid diet; some will consider it worse than a straight-jacket. The chief drawback is that a man will be shut off from much pleasant social life, which is built around evening dinners, banquets, etc. I should not suggest such a regimen to a patient with mild symptoms, knowing that he would not even give it a trial. It is up to the patient with severe symptoms to make his choice between two things: on one side conviviality and evening meals generally, with consequent pain and insomnia, or partial daily fasting with sleep and freedom from pain at night. I believe the real sufferer who has gone through years of distress, and especially insomnia, will try anything that gives relief and will soon become reconciled to such Draconian procedures on the ground that of two evils the lesser one should be chosen.

I realize that the present communication, without laboratory experiments and without statistical data, may have little scientific value. However, as this one case has been well observed, I hope that some internists, better qualified than I am, may have occasion to try this plan in the treatment of intractable forms of peptic ulcer. Paul S. Campiche, San Francisco, Calif.

Editorials

EUTHANASIA

IN articles appearing in the same Journal* (*American Jour. Psych., Vol. 99, No. 1, July, 1942), Foster Kennedy, M.D. and Leo Kanner, M.D., touch the problem of euthanasia. The former favors euthanasia under legal sanction in carefully defined cases, and offers some strong arguments in support of his position, but the latter opposes it on the grounds that an idiotic child may have fond parents who want him alive. The editorial writer in summing up the case seems to feel that no law will be passed until public opinion favors euthanasia and that the nucleus of such public opinion will be the attitude of the parents of idiots. He feels that in evaluating and meliorating the parental attitude, the psychiatrists' interest in the whole question must center.

This is a very different attitude from that in which euthanasia by edict becomes merely an instrument of power in the hands of the state. Presumably what is meant is for the state to permit the painless death of idiots in cases where the parents desire it. The role of the psychiatrist would be in helping the parents to think logically, and to make decisions which would not leave them dejected by later remorse or sense of guilt.

The state would be in effect saying: "This idiot is of no value to the state and the state is only too happy to be rid of the idiot, provided his death is agreed to by the parents." In such an interpretation of a law permitting euthanasia, the state reveals an attitude of making its desire conditional upon consent and such a law would perhaps lead to a modification of the law in which the urgency of euthanasia must not be conditional upon anything except a medical certificate of idiocy.

But if legal sanction be regarded merely as state's permission to commit euthanasia in cases in which parents desire it, the state might more easily modify the law to permit euthanasia for disabling feeblemindedness, should the parents desire it.

The desire of parents to have an idiotic child killed may range from pity to pride and may mask itself under many guises. Presumably the psychiatrist would be employed to determine the genuineness of the parental motive, and this would impose on a medical man a very undesirable responsibility.

It seems questionable if we shall ever intellectually come any closer to an evaluation of the two tremendous ideas involved in euthanasia—life and death. Our attitudes today are built upon authoritarian teachings, superstitions and the intuition, with very strong moral respect for life, and a decidedly mechanistic and nihilistic attitude toward death. Our agreement upon the positive worth of life and the right to live one's life is so essentially a part of our democratic idea, that its ablation in even one specific instance may do harm to the inviolateness of the ideal. If the ideal is really inviolate, then the state ought not to permit even the parents of an idiot to decide the idiot's death. If the state feels that it has a role in keeping the genetic strains pure, it should make the law mandatory upon a physician's certificate of idiocy, and should not consult the parents. If it does this, however, it becomes decidedly undemocratic and totalitarian.

Then there is the question whether medical men should be granted direct authority in deciding death or in infiltrating death. Already indirect power is theirs in jurisprudence in cases where sanity is

questioned, but do they want direct power or the job of executioner? Killing an idiot gets rid of parental nuisance and, provided the parents do not succumb to a life-long remorse, they will be freer to do what they want to do: but will their path in life after the euthanasic death of their child lead them to anything more valuable than the experience of caring for a defective? If we regard material expansion as the ideal, then the answer is yes. If we regard moral and spiritual development as paramount, the answer probably is no.

Finally, since we know nothing about the value of a life which is intrinsically sealed by idiocy against our efforts to decipher it, we might perhaps be wise to choose the ancient law of Moses and refrain from killing even under the most refined conditions of rationalizing efficiency.

ROENTGENOLOGY OF THE SMALL INTESTINES IN NUTRITIONAL DISTURBANCES

THE roentgenology of the small intestine has been one of the main topics of the field of roentgenology in gastro-enterology. Among the outstanding publications is the Carman lecture delivered before the Radiological Society of North America, in 1940. The studies made by Golden were so exhaustive that since that time practically nothing new has been heard in this field. The author reported his findings of abnormalities of the small intestine in the nutritional disturbances. We would like to draw attention to this excellent publication, for it covers not only the roentgenological findings, but also the pathological-anatomical findings in these rare conditions. Such exhaustive studies can only be made when the author has a staff of such well trained cooperators at hand, as Golden had in those men working in different departments of the Presbyterian and Babies Hospitals in New York. In addition, he made a most thorough study of the literature covering this interesting field.

Certain nutritional deficiency states, in both early and late stages, are associated with disturbances in the motility and mucosal pattern of the small intestine recognizable by roentgen examination. When no obvious anatomical reason for their existence is apparent, they may be classified as primary; and when they are associated with some organic disease of the gastro-intestinal tract, mesentery, liver or pancreas, they may be described as secondary.

Pathological changes in the intestinal wall occur as a result of long continued nutritional deficiency, but seem to vary markedly in different individuals. There is strong evidence of damage to the intramural nervous system. The earlier changes are undoubtedly reversible, but if the condition persists long enough, the intestine may be permanently damaged. Under adequate treatment, the middle region of the small intestine does not seem to be restored to normal as rapidly as the proximal region; the former may show persistent evidence of damage after the latter appears normal, and after the patient is clinically well.

The clinical as well as the pathological manifestations are variable. The symptoms are often obscure or misleading. They may complicate a condition requiring surgical treatment.

Associated with the objective changes in the small intestinal pattern, disturbances in the physiology of absorption occur which suggest that the small intestine may be part of a vicious circle, for the interruption of which, parenteral treatment may be necessary.

Golden points out that objective changes in the small intestinal pattern, similar to those occurring in vitamin deficiency, have been associated with clinical and experimental hypoproteinemia and several other conditions.

The roentgenological findings in deficiency states involve motility, and the outline of the loops as well as the mucosal pattern of the small intestines. Golden remarks that those changes seem to be most pronounced in the region of the middle third of the gut, whereas the terminal ileum, for some reason, seldom appears abnormal. The motility may be increased or decreased, and the intestinal loops may be distended or contracted. The mucous membrane may show coarse folds in some cases, whereas, in others, an obliteration of the folds has been seen. Until now, we do not know what particular pathological conditions cause one or more specific changes in the roentgenological outline. Here is a tremendous field which has to be thoroughly studied. Hyper- and hypo-motility of the small intestines surely cannot be caused by the same conditions.

Of the greatest importance is the fact that exactly the same type of intestinal pattern as that found with well advanced deficiency states, is present in normal newborn infants, which after three or four months is replaced by the usual adult pattern. This change is probably due to the evolution of the incompletely developed nervous control of the intestine.

It would seem that some common mechanism must operate in the production of these phenomena from so many different causes. A possible, if not the most probable, mechanism is the interference with or damage to the intramural nervous system of the intestine.

Although a positive differential diagnosis cannot be made, the detection of these abnormalities of the small intestines on roentgen examination will serve to draw attention to the possibility of a nutritional deficiency and may lead to its correction before serious damage is done.

We would not be astonished if the coming years would permit us to make exhaustive studies, based on material such as people in prison camps, who, unfortunately, have been on a vitamin deficiency diet for a long time.

Franz J. Lust.

LITERATURE

Abnormalities of the Small Intestine in Nutritional Disturbances, Some Observations on Their Physiologic Basis (Carman Lecture). *Ross Golden Radiology*, 36:262-286, March, 1941.

ERRATUM

The second paragraph of the Summary of the article "The External Secretion of the Pancreas and Diabetes Mellitus" by Pollard, Miller and Brewer, which appeared in the January issue, should read "The observed deviations from the control group of eight patients were diminutions in volume of secretion and total secretion of bicarbonate and the enzymes, amylase and trypsin" instead of four patients as stated.