In the original article on oral therapy for pruritus ani, (1), 42 cases were reported by the author and his progress described. Sodium dilantin, (diphenylhydantoin), employed originally in treatment of epilepsy, and taka-diastase, gr. V; novatropin, gr. 1/24; phenobarbital, gr. 1/3 and sodium dilantin, gr.ls was given four times per day, (one before each meal and one before retiring). All cleansing of the skin with soap and water was stopped; only olive oil or vaseline were used. Olive oil was employed to remove old vaseline. Bed clothes and underwear were laundered specially with mild soaps. Supplemental management included avoidance of alcohol, mineral oil, condiments and fried food. Occasional saline enemas were advised. In the office a twenty-five per cent silver nitrate solution was applied to fissures.

This routine, which represented the result of several years study of the problem, was applied to forty-two cases, most of whom responded satisfactorily in a short time. Since then, more cases have been added. It is now possible to review this method of treatment, with a follow-up on the earlier cases and observations on more recent ones.

The form of therapy used in this series has differed from others, in that it is oral and directed at the most likely site of origin of the condition, the nervous system, employing drugs which are used in the treatment of epilepsy. It contrasts definitely with local anal and perianal approaches heretofore employed with little, if any success.

The follow-up on the earlier cases brought out interesting and useful information. It showed that the medication must be used in considerable strength to bring about definite changes; must be continued for a long time; and that patients have to be guided and frequently observed until a good result has been obtained. It also showed that recurrences were not so common as had been originally predicted. There were some recurrences, however, and a few failures.

Many cases responded in a surprisingly short time. In rare instances some even cleared up in a few days or weeks. Even the average case showed some symptomatic relief within a few weeks. No particular change was noted in the skin at this time. Then came a period of another few weeks, during which the patient made more gradual and steady progress. A definite change in color of the affected skin then took place. The redness gave way to a bluish tinge and this gradually paled until the eighth week, when it appeared normal in color. The skin fissures became shallow and disappeared as did the adjacent ridges, and sleeping was no longer a problem. Shortly after this the patient would report "no itch at any time."

Difficulties met with were many. It was not found possible to merely give the sufferer a capsule and thereby relieve him or her of the pruritus ani. It required the most careful supervision of details and constant encouragement to a few who would have given up treatment long before results were obtained. These people were all of a nervous type and some were difficult to manage. As soon as some relief was noted, however, they became most cooperative.

The first difficulty was in the management of the drugs. Taka-diastase, aiding starch digestion which is often deranged in nervous indigestion, was found to be essential. A high B colI count in the stool, a consistent finding, suggested inability to digest carbohydrates. When this ferment was omitted, in three cases, and only dilantin sodium administered, no results were obtained. All three reported partial relief as soon as the taka-diastase was added and they then continued on toward recovery. Novatropin seemed useful as an antispasmodic, though not essential. Phenobarbital was not required in all cases. It was helpful as a mild sedative and has usually been combined with dilantin in treatment of epilepsy.

Sodium dilantin (diphenylhydantoin) is the most important element in the formula. It is also the factor that has to be regulated most carefully as regards results and toxicity. The total daily dose employed here, and in epilepsy, is six grains. This is reduced if too much sedative effect is noted, a rather rare occurrence; it is a mistake to reduce it too promptly. Other toxic manifestations are dizziness, muscular incoordination, gastric disturbances, swelling and bleeding of the gums, excessive activity, or loss of weight. A rash appeared in three cases, although phenobarbital had not been included in the prescription.

Muscular incoordination appeared in one of the
earlier cases and in three of the latter group. Gastric distress was noted a few times and bleeding gums once.

Whenever possible large doses of dilantin are used; small doses producing no effect at all. Toxic symptoms were often transient and did not represent a great problem.

With five cases, sodium dilantin could not be used, either because of toxicity or its failure to help the condition. This was discouraging at the time but proved to be a most fortunate occurrence. It was true that the list of sedatives and anticonvulsants had been thoroughly combed and no substitute for sodium dilantin could be found. All other sedatives when pushed too far made the patient lethargic, whereas diantamin was useful because of its slight hypnotic effect. When confronted with this problem it was decided that therapy must still follow along the same basic lines. In epilepsy, a ketogenic diet is often employed with good results, but in this rectal condition a high fat diet was out of the question. Further investigation uncovered the fact that glutamic acid, one of the amino acids, is occasionally used in treatment of petit mal. It is reputed to have been of value in decreasing the number of seizures in some instances. Therefore glutamic acid was used in place of sodium dilantin in five cases.

The first patient on whom it was employed showed an interesting response. A young man, thirty-six years old, exhibited the worst clinical picture among males of the entire series. His history of pruritus ani dated back four years. He had received X-ray treatments, countless local injections and had a bureau drawer full of ointments. When seen by me the condition had reached the most severe stage, with fissures, redness and ulceration spread out over a twenty-four inch circle centering on the anal canal. The scrotum was red, raw, weeping and exquisitely tender. The under side of the penis was similarly affected. The patient was almost out of his mind and was exhausted from sleeplessness.

He was given the original medication and routine instructions. He promptly became even more distressed. A fine barbital type of rash covered his entire body; he said he had used phenobarbital many times before this without unpleasant effects. He was therefore given only taka-diastase, gr. V and glutamic acid, in 7½ grain tablets, four after each meal. Within one week a striking change took place. He estimated that barely twenty-five per cent of the itch remained. The weeping of the surfaces had indeed stopped, and the inflamed areas were dull and changing to a bluish tinge. In another week the area had greatly improved and it appeared normal at the end of five weeks. The itch had entirely gone by then. The barbital rash slowly disappeared and seemed unaffected by the therapy. Others in this group recovered but more slowly and less spectacularly.

It was felt that glutamic acid might be useful when added to the original sodium dilantin formula. This was done in several instances with good results. One case, however, became much worse when the amino acid was added, with itching more severe than when first treated. Withdrawal of this item permitted the case to go on to recovery. This reaction is totally unexplainable at present. It shows again that careful regulation is required in each instance.

The most interesting information obtained from the discovery of this alternate form of therapy was that two drugs, dissimilar in type, could produce the same result in selected cases. Sodium dilantin is of considerable value in the treatment of grand mal epilepsy and glutamic acid has been employed mainly in cases of petit mal. Each is not particularly effective in the other field. Oddly enough this seems also to be true in different patients with pruritus ani. Just why this is so, is puzzling. It does fix, however, more firmly the rationale of this oral therapy in this difficult and chronic rectal condition. It is also interesting to note that some of these cases, treated only with taka-diastase and glutamic acid, cleared up without the use of any sedative medication.

Recurrences are to be watched for and a certain number expected because of the very nature of the condition as we now understand it. Factors which caused the original injury to the nervous system may still be operating. The patient may not have the strength or courage to combat conditions which can again “get them down.” There is also the possibility that the nervous system will react the same way again and again, as it does with those who are “epileptic.”

It was a pleasant surprise to find that recurrences were not too numerous and that they were rather easily controlled as soon as they appeared. Patients were ordinarily advised to decrease medication and gradually stop it, one month after all symptoms had been relieved. They were also told to take their capsules again promptly at the first sign of any recurrence. It was found that the patient could withstand severe nervous shocks without return of itching, if the perianal skin had been normal for a long enough time.

Cases which did not respond to treatment were as follows:—a young man with financial and marital troubles who took his medication irregularly; and older man with prostatic trouble who died of that condition some months later; a man with gastric ulcers who could not continue medication because of the severe abdominal distress it caused; a young man working under pressure sixteen hours a day; and one man and one woman addicted to alcohol. In two instances, about to be listed as failures tridione was substituted for other anticonvulsants. Prompt relief was noted and further study of this drug will be made. This makes a total of six cases out of one hundred and sixteen that failed to respond. There were also five cases who discontinued treatment, with unknown results.

In the literature on epilepsy, pruritus ani is not mentioned as an associated condition. Nor, in this series of cases has epilepsy been recorded. There have been a number of patients, however, who gave histories of a “nervous breakdown”, and it is possible that a neurologist could have unearthed more detailed information along these lines. Epilepsy is at best a vague term.