

A REPORT OF TWO CASES OF PELLAGRA.*

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There is no longer any doubt about the existence of pellagra in some parts of the United States. How long it has been prevalent in this country and over how large a territory it is distributed are still matters of some controversy. It is believed by some to be of quite recent development, while others are of the opinion that the disease has been present for many years but has not been recognized. There is strong probability that the latter contention is true. Since the clinical picture of the malady has become better known, cases have been reported from a number of different sections, and many of the older asylum physicians recall cases which occurred in their practice years ago that presented the symptom complex now diagnosed as pellagra. I recall several such unrecognized cases that came under my care as early as 1900. Regardless of the time of its first appearance in this country, there is reason to believe that the disease is rapidly increasing, and in some sections, especially in the Southern States, enough cases have been found to indicate a very serious state of affairs. I am convinced that this disease exists over a much larger area than has been supposed, and it is quite possible that before many years it will prove to be a problem of national concern. Believing that it is important that the attention of the profession be called to cases of pellagra developing or existing in sections where the malady has not been previously recognized, I am reporting briefly two cases that have come under my observation at the Parsons State Hospital. These, so far as I have been able to determine, are the only authentic cases reported from Kansas.

CASE I.—M. P., white, female, age 60, married, housewife by occupation. A person of considerable education and decided refinement, comes of a family of the better class of people. Admitted to the Osawatomie State

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Hospital in 1904, and transferred to the Parsons institution in 1905. The history of the patient states that she had been suffering from insanity of a mild type for twenty years, and had developed epilepsy a short time before admission to the hospital. Family history negative. Patient of a nervous temperament. Type of epilepsy grand mal of a moderately severe form. She was of rather delicate physique and in frail physical condition during the entire period she was under observation. Her mental condition was that of incomplete dementia. There was nothing of special interest in the case until in the early summer of 1908 when she began to fail physically with loss of strength and a general feeling of malaise. Was inclined to lie in bed more than usual. Later on in the summer she developed marked gastro-intestinal derangement. A note in the case record dated August 28, 1908, says: "Mrs. P. is very frail at all times and recently has been more delicate than usual due to intestinal disturbance with persistent diarrhoea. She is much emaciated and quite anemic. Quite restless but sleeps fairly well. If permitted would eat a large amount but is not able to assimilate her food well." The bowel movements were quite offensive, very liquid and dark in color, at times having a pronounced green tint. Examination of stools was negative. There was a certain amount of stomatitis present, tongue red and fissured. There was no fever at any time. About the same time, in the summer of 1908, there appeared an erythema on the dorsum of the hands and a slight scaly eruption about the nose, lips, and chin. The lesion on the face had a peculiar fungoid appearance with apparent enlargement and excessive secretion of sebaceous glands. The erythema on the hands was quite symmetrical involving the entire dorsal surface but extended no higher than the wrists. The hands, at first red in color, became deeply pigmented and brawny as the disease progressed and the skin would crack and fissure especially over the metacarpophalangeal articulations. The skin on the hands appeared somewhat thickened and rough in the early stages of the eruption with later scale formation and decided thinning. The mental symptoms were not pronounced, the patient being quite demented, but late in the course of the disease there was considerable depression. A note dated November 6, 1908, says, "Has declined rather rapidly for some weeks. Has been in bed and has had much bowel disturbance. Emaciation quite marked." Medication seemed to have very little effect upon the diarrhoea. A great variety of medicines, opiates, astringents, etc., as well as restricted and special diet were given for the intestinal trouble but nothing was found to control it. The patient improved some during the early winter, the diarrhoea becoming less pronounced and the skin lesions subsiding to quite an extent but she was not able to leave her bed. The reflexes were heightened throughout the entire attack and later on there was very marked spasticity with contractures. A note made March 6, 1909, states, "Condition quite unsatisfactory, seems to be in pain much of the time as indicated by position and groaning. Recently has developed contractures of lower limbs. Bed sores present." Patient continued to fail rapidly and died March 13, 1909.

CASE II.—I. H., white, female, age 34, single, no occupation. Admitted to Osawatomie State Hospital, 1901, and transferred to Parsons State Hospital, 1904. Family history negative. Patient had first convulsion at age of five months during an attack of cholera infantum. Following this acute illness convulsions continued in a light form gradually becoming more frequent and severe as she grew older. First evidence of active mental disturbance at age of fourteen. On admission patient was in vigorous general health, weighing 170 pounds. Feeble-minded with marked facies epileptica. She had two short attacks of acute gastritis in the spring of 1905 and severe status in July of same year, otherwise, she remained in good general health until the fall of 1909. A note in the case record dated June 19, 1909, says: "A big strong woman whose health is excellent. Occasionally with a severe seizure she has to go to bed for a day, complaining of feeling nervous and uncomfortable and does not rest well. Usually is active and a good worker when not cross. Has about 15 seizures per month. Rather loud and boisterous but most of the time is good natured although rough in her manner and language." In September, 1909, she began to complain of not feeling well with vague pains in abdomen and lower extremities, anorexia, and some loss of weight. Developed delusions that she had been poisoned and became depressed, refusing to eat. Was nauseated and would induce vomiting, at times, by putting her finger in her throat. Bowels constipated. Tongue furred. Temperature and pulse normal. The sensory symptoms at first vague and more or less indefinite soon became very pronounced. Patient complained much of severe pain in abdomen, pelvis, and extremities, and soreness on pressure, and was put to bed. A note in case record dated October 18, 1909, says, "Patient has complained recently of severe pain both on urination and defecation. Examination showed a very firm thick hymen the opening through which was so small that no vaginal examination was undertaken. The mucous surfaces about the external genitals were somewhat congested and sensitive. Examination of the anus showed a well-marked fissure with slightly inflamed mucous membrane. The fissure was cauterized with nitrate of silver." Urine was negative. Patellar reflexes abolished and she soon developed parasthesias in various parts of the body and a marked analgesia in both lower extremities. There was slight fever present with pulse somewhat weak and accelerated. She had some difficulty in walking owing to weakness and ataxia in lower limbs. A diagnosis of multiple neuritis was made and patient treated accordingly. There was some improvement observed during the month of November but a note dated December 1, 1909, states, "For several days the patient's condition has been more serious, pulse has been hard to count and general weakness is pronounced. Has been on strychnine one-thirtieth grain every three hours for two days. To-day was given one pint of water by rectum, several times, with benefit. She has developed a severe stomatitis which has caused much annoyance." Tongue red and fissured with small blisters and ulcers around the edge. Mucous membrane on inside of the cheeks

also showed ulcers. The inflammation extended into the pharynx making it difficult to swallow solid food. Patient at times refused to eat on account of sore mouth. Temperature ranged from normal to $100\frac{1}{4}$. Bowels still inclined to be constipated although loose occasionally for a day. She passed small amounts of purulent material. Condition of patient varied somewhat from week to week but with no marked change until the latter part of January, 1910. She was able to be up and dressed part of the time. The case record shows on January 30, 1910, a sudden rise of temperature to 104 following a few days of more sensory complaint than usual. Fever reduced by sponging. At this time she developed an erythema on the dorsum of both hands particularly marked over the knuckles. The hands in a few days became very rough with fissures extending through the skin making open sores in several places. No pain nor itching of hands present but they were quite sore when handled. The erythema did not extend above the wrists but there were rough patches on the elbows. At this time a tentative diagnosis of pellagra was made. Some improvement was observed during the next week but a note on February 8, says, "During the last few days patient has been very sick, temperature course irregular, much of the time being high, reaching 105 upon one occasion. She has suffered much from severe vomiting. Treatment symptomatic, cold sponging, strychnine, and nourishment as freely as possible." During these febrile attacks there appeared a pronounced erythema over nose and cheeks, bat-shaped in outline. Later on, the skin on both hands and face became scaly and on the hands much thinned and roughened. There was considerable pigmentation with a quite well-defined line of demarkation at the wrists. Examination of blood smears showed a reduced number of leucocytes and considerable evidence of anemia. A differential count of leucocytes gave the following result:

Small mononuclear	21%
Large mononuclear	9%
Multimorphonuclear	68%
Eosinophiles	2%

The mental condition of the patient underwent a very decided change during her last illness. Her emotional state which had previously been rather exalted became much depressed with occasional outbursts of pronounced excitement, the patient being at times kept in bed with extreme difficulty. There was a partial return of the reflexes towards the end of her illness and a slight tendency to spasticity but no contractures. Sensory symptoms continued to the end. Died April 16, 1910.

In this paper I have made no attempt at a general discussion of pellagra, and have nothing new to offer regarding etiology nor pathology. In this connection will say that our dietary does not contain an unusual amount of corn products, and that which is used by the hospital is supposed to be of good grade.



CASE II. Showing lesions on both face and hands. Note rough scaly condition of face.



CASE II.—The hands showing typical lesions over metacarpophalangeal articulations. Note pigmentation on dorsum with sharp line of demarkation just above wrist, especially marked on right hand.

The points of special interest brought out by these cases may be stated as follows:

1. Neither case began in the early spring, when it is usually taught that pellagra develops.
2. In one case the disease developed in a person in vigorous general health.
3. In one case the symptoms for a number of months were those of multiple neuritis.
4. Pellagra is not always an afebrile disease, as has been stated by some writers, but may have associated with it a high degree of fever.
5. The distressing and persistent sensory symptoms presented by Case II.
6. That pellagra exists in a section of the Middle West where it was not positively known to exist before.