TECHNIC

Make a horse-shoe incision, beginning just above the anus, and extend the incision arms ventrad to points nearly opposite the urethral meatus. Put a finger in the vagina, and feel the well-rounded margin of the pubococcygeal portion of the levator ani muscle on one side. Enter the point of the closed scissors in one arm of the horse-shoe incision, stab the closed scissors down to the muscle that is felt by the finger, open the scissors *in situ* widely, stripping the muscle free for a couple of inches. Repeat the process on the opposite side. Lift up the vaginal flap with a tenaculum and snip all fascia interposed between the levator ani muscle margins. Hook a large curved Hagedorn needle armed with kangaroo tendon into one levator ani muscle margin, then into the opposite one, and lift the two out plainly in sight by pulling on the suture. Tie the suture, but leave long ends for traction purposes until two or three more kangaroo tendon sutures have reconstructed this important contractile part of the perineum. Next, run a continuous suture of small kangaroo tendon through margins of perineal fascia, and bring these fascial margins together. This will approximate pretty well whatever remains of transverse perineal muscles and

Fig. 3.—Sutures uniting margins of perineal fascia and placing in action remnants of sphincters and of transverse perineal muscles.

sphincters. Bleeding may usually be disregarded during the course of the operation, as it practically stops by the time the suturing is completed.

Leave room for the tips of three fingers in the vagina. When all of the deep suturing is completed, there should be just room in the vagina for the entrance of the tips of three fingers used as a gauge.

Finally, unite margins of skin first with a single interrupted suture of small chromic catgut in the mid-line for artistic symmetry. The rest of the skin sutures, preferably of small chromic catgut, may be continuous or interrupted as one pleases, but not drawn too snugly; leaving room for escape of oozing blood.

Dust the suture line with aristol. Put on a firm pad with T-bandage, for compression to stop oozing, for a few hours. Empty the bladder by catheter for three days. Keep a handful of dry gauze between the thighs, against the perineum, to avoid maceration of sutures, for a week.

In cases with complete rupture of the external sphincter of the anus, a second horse-shoe incision is made, with the arms

pointing dorsad. Expose the blunt ends of the contracted sphincter ani, unite them accurately with one or two kangaroo tendon sutures, and then proceed to do the chief perineal operation above described.

Cases with very extensive perineal lacerations, involving walls of rectum and vagina, requiring special technic, are not described in this article, the object of which is to present a really satisfactory perineal operation, requiring but a few minutes of time for its performance and applicable in most of our cases as they run.

616 Madison Avenue

SALVARSAN IN PELLAGRA

REPORT OF CASES TREATED AT THE GEORGIA
STATE SANITARIUM IN 1911

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The treatment of pellagra has demonstrated only the absolute futility of the drugs used. We constantly hear of some specific, which, on a fair trial in the hands of those in position to pass on the remedy, proves to be an utter failure. Too many spontaneous cures are accredited to the use of drugs or some line of treatment.

Among the first drugs strongly advocated was atoxyl. This preparation of arsenic was given a fair trial by Dr. N. P. Walker, of the Georgia State Sanitarium, who decided that there had been no effect made on pellagra so far as he was able to see. Subcutaneous injection of bichlorid of mercury proved equally useless.

Hexamethylenamin (urotropin), also used by Dr. Walker, produced no beneficial effect that he was able to observe.

Mizell, of Atlanta, strongly advocates the use of calcium sulphid. In a recent article he says: "In fact, the results are so prompt that I would feel like claiming specific action without a knowledge of its chemical action." Again: "In one case in which the eruption had been continuous for twelve months, the patient, although being treated by arsenic, was relieved in twelve hours; was out of bed in three days, and had no erythema in ten days." Quoting again: "In all cases this drug is all that is necessary to relieve aggravated cases of simple pellagra." These quotations show this observer's faith in his remedy.

Calcium sulphid was given a careful and systematic trial by me and my assistant absolutely without success.

Baker, of Augusta, Ga., advocated sodium bicarbonate, 0.3 gm. every four hours, and 0.3 gm. pancreatin, in salol-coated tablets, every four hours, a meat-free diet, and stressing carbohydrates.

CASE 1.—J. C., a well-nourished, middle-aged colored man, resisted all other treatment. Late in the summer of 1910 he was put on this line of treatment and the effect was remarkable. He became entirely well, and was discharged as clinically cured. We have not heard from him since.

The following early summer this treatment was inaugurated in some eight or ten colored females and was uniformly unsuccessful. J. C. "just got well."

Walker and Yarbrough, in the spring of 1911, gave salvarsan to three pellagrous patients.

CASE 2.—P. T., a well-nourished, middle-aged, colored woman had a most severe attack, and was thought to be in a hopeless condition. Salvarsan was given intravenously; recovery was prompt and complete, except mentally. She gained rapidly in weight and was permitted to go home clinically cured. We have not heard from her.

CASE 3.—N. D., colored woman, aged 23, had first symptoms probably in 1909; admitted to the sanatorium in October, 1910; following spring developed classical pellagra symptoms; was given salvarsan intravenously. All the symptoms cleared up, and she remained well until April, 1912, when she complained of severe abdominal pain and she has slightly inflamed tongue and marked tremors now (April). Benefit, if due to salvarsan, is only temporary.

CASE 4.—L. C., colored woman, well nourished, aged about 25, developed classical symptoms of pellagra in the spring of 1911; was given salvarsan intravenously. All the symptoms cleared up promptly, and she remained entirely well until the early part of March, 1912, when she had a sudden rise in temperature to over 105 F. with general prostration. Nothing pointing to other troubles developed, and we were finally forced to admit the return of pellagra. Diarrhea then developed. She was again given salvarsan on March 16, 1912, and her general condition has improved slightly, high temperature immediately disappearing. Benefit, if due to salvarsan, was only temporary.

Following this work by Walker and Yarbrough, I gave salvarsan in eight cases in the summer of 1911.

CASE 5.—A. B., a colored girl, aged 16, laborer, developed first symptoms probably in the summer of 1910. In the spring of 1911 she developed classical symptoms of pellagra; was given salvarsan intravenously and all symptoms abated nicely, and the patient was permitted to go home on furlough in the late winter, clinically cured.

CASE 6.—N. S., well-nourished colored woman, aged 39, was said to have developed classical symptoms of pellagra, nervous type, for the first time in April, 1911. She was given salvarsan July 29, 1911, intravenously. Before treatment the patient had been having convulsions for about one week. Following administration of the drug convulsions stopped. The skin, tongue and intestinal symptoms promptly cleared up. Aug. 23, 1911, patient had three convulsions within four hours and died in the fourth. Benefit in this case, if due to salvarsan, was very brief.

CASE 7.—T. S., emaciated colored woman, aged 32, showed first symptoms of pellagra in the fall of 1910. In the spring of 1911 patient developed typical symptoms of pellagra, nervous type, and was given salvarsan intravenously Aug. 11, 1911. Following this there was slight intestinal improvement, but otherwise no change. Patient died Aug. 26, 1911. No benefit.

CASE 8.—J. F., fairly well-nourished colored woman, aged 22, laundress, in the summer of 1911 developed typical pellagrous symptoms, nervous type. She was given salvarsan intravenously, and mouth symptoms cleared up. Her general condition showed little improvement. She dragged along until Jan. 6, 1912, when she died of a complication of nephritis, meningitis, atelectasis of the right lung, etc. Benefit in this case, if due to salvarsan, slight.

CASE 9.—N. N., a well-nourished colored woman, aged 26, in the spring of 1911 showed classical symptoms of pellagra (probably the first) with mania. July 20, 1911, salvarsan was given intravenously. July 30 there was a general improvement in the skin, bowels, tongue and mental symptoms. Aug. 4, 1911, she was reported much worse, gradually grew weaker, and died Sept. 22, 1911. Benefit, if due to salvarsan, brief.

CASE 10.—M. J., poorly nourished colored female, aged about 16, in the spring of 1911 developed nervous type of pellagra; was in rather bad shape when salvarsan was given July 29, 1911. By August 22, all symptoms had slightly improved except twitching of the upper lip, which had not abated. She is virtually the same now as when given salvarsan. Probably no benefit in this case.

CASE 11.—A. L., fairly well-nourished colored female, aged 30. Second attack. Salvarsan given intravenously Aug. 5, 1911. On August 30 there was general improvement. December 15, bowels were normal; tongue red on edges and fissured; skin symptoms improved but not well. March 25, 1912, general condition good, but roughening over elbows noticeable; tongue showed tremor and slight inflammation, and she has had severe abdominal pain for a week (April). Benefit, if due to salvarsan, was not permanent.

CASE 12.—O. S., well-nourished colored female, aged 27. First attack of pellagra, which is typical, developed Aug. 11, 1911. On August 16 salvarsan was given intravenously; on August 22 all symptoms had disappeared. August 25 patient was in excellent condition. She had remained well until the past few days (April, 1912) when she complained of nausea, which we are disposed to attribute to the return of pellagra. Benefit, if due to salvarsan, was marked but not permanent.

Of the eleven patients given salvarsan in 1911, two went out on furlough clinically cured, and we have not heard from them since the opening of the pellagra season. One was supposed to have been well until the nausea developed a few days ago (April, 1912). As stated, this is construed as a return of pellagra; three have relapsed and have been treated the second time; one is unimproved; four are dead. Not a very encouraging showing.

In percentages: 18 per cent recovered; 9 per cent. unimproved; 36 per cent. relapsed, and 36 per cent. died.

Dr. Martin, of Hot Springs, Ark., gives us a very good paper on salvarsan and pellagra, and would explain my failure to get results by saying I should have repeated my treatment every ten days, as that appears to be the cycle of the theoretical pellagra germ. Perhaps so. The symptoms in my cases, however, have not shown the prompt and spectacular abatement that his cases have shown.

I am forced to the conclusion that we have not as yet found a cure for pellagra. Salvarsan, however, has not been given a thorough trial as yet, and it may be that the coming spring will develop obscure points in the use of salvarsan that will bring more certain and permanent results than I have been able to obtain with its use thus far.

A CASE OF FATAL HEMATOPORPHYRINURIA FOLLOWING THE PROLONGED USE OF TRIONAL AND SULPHONAL

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Because of the unusual occurrence of this condition it might be well to define it and consider it briefly from a historical standpoint.

Hematoporphyrin is described as hematin without the iron, and, in minute traces, occurs as a constant constituent of normal urine. Hematoporphyrin is frequently present in the urine in increased quantity in disease, but without being associated with any obvious change in the color of the urine. This form of hematoporphyrinuria is seen in many ailments and was first described in connection with measles and rheumatic fever. Again hematoporphyrin may occur in great excess in the urine associated with a distinctly abnormal color described as pink, dark brown, port wine or almost black. Until recently it was supposed that it was the hematoporphyrin which caused these abnormal colors, but we now know that other elements, as yet unrecognized, are responsible for this, since these changes in color occur without discoverable hematoporphyrin in the urine and even persist after its removal.

Hematoporphyrin appears in the urine in pathologic quantities under two conditions:

1. A class of rare cases due to disturbed metabolism, apparently of gastro-intestinal origin. This type is more liable to be intermittent or paroxysmal, or again the condition may exist for many years. In this group the abnormal condition of the urine seems not to be in itself of any very grave significance.

2. In a larger class of cases we find that hematoporphyrinuria is a symptom of drug intoxication, usually sulphonal, trional or veronal. The condition is only seen in those cases