apparently unaltered. Penicillin treatment was purposely delayed so that non-specific effects could be excluded. Ten days after beginning treatment, penicillin in oil-wax suspension having been superimposed on the arsenic-bismuth therapy, only scattered pigmentation remained on the face and the gummatous lesion was obviously healing rapidly.

Conclusions

It seems probable that in November, 1945, this man had secondary syphilis, possibly masked by scabies, and that the small amount of penicillin (about 600,000 units) given at that time was sufficient temporarily to suppress the disease. The relapse lesions, appearing 18 months later, were of a secundo-tertiary type.

This case suggests that penicillin in inadequate dosage over a short period can, like the arsphenamines, produce the phenomenon of precocious tertiarism. It illustrates the importance of making an accurate diagnosis in any dermatological condition before using penicillin by injection.

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NICOTINAMIDE AND BLOOD SUGAR

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The effect of nicotinamide (N.A.A.) on blood-sugar levels in normal controls and in diabetic patients has been discussed by Neuwahl (1943), Gordon (1946), and Wade (1947). In view of the different results obtained it would appear worth while to record the following observations, which were made at a time when investigations regarding co-enzyme were taking place.

Three fasting normal subjects were given 0.5 g. of N.A.A. by mouth, and all experienced slight effects such as flushing of the face. Blood-sugar estimations were made by Folin and Wu's method, and co-enzyme was estimated by that of Hoagland *et al.* (1942). The results obtained were all identical in type, and the following table shows one curve that was obtained.

Time		Blood Sugar	Blood Co-enzyme
		0.105 g. %	4.3 mg./100 ml.
Fasting		0.093	4.0
1 hr. after 0.5 g. N.A.A.		0.098	4.3
1 1/2 hrs. "		0.103	4.0
2 "		0.089	4.4

Two other normal subjects were each given 0.5 g. of nicotinamide and nicotinic acid, and neither showed any variations in blood co-enzyme up to six hours. Another normal subject showed no variation in blood co-enzyme content during the two hours of a blood-sugar curve following 50 g. of glucose by mouth. The blood sugar ranged from a fasting level of 0.099 g. % to a maximum height of 0.186 g. %.

Neuwahl showed two types of response to nicotinamide in normal subjects. One figure demonstrated a marked fall in blood sugar after 0.4 g. N.A.A. intramuscularly and also after 0.25 g. intravenously, whereas in another figure there was a considerable rise in blood sugar after 0.45 g. intravenously. He also showed that 0.06 g. N.A.A. and 2 units of insulin produced a greater fall in blood sugar than did 2 units of insulin alone. Burke and McIntyre (1939), however, had demonstrated earlier that the effect of insulin given to rabbits is not so great—i.e., the blood

sugar is depressed less—in those receiving nicotinamide acid.

Wade has recently shown that nicotinamide produced no alteration in the blood-sugar curves of diabetics following 50 g. glucose, even though his patients had received 1.8 g. of nicotinamide daily for 14 days prior to the second blood-sugar curve.

From these results it would appear that, in general, nicotinamide is without effect on the blood-sugar levels in normal subjects or in diabetic patients. The absence of any effect on the blood co-enzyme content is possibly a further proof of this fact.

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Medical Memoranda

Transient Hemiplegia following Injection of Sodium Morrhuate

The following case seems to be sufficiently unusual and disturbing to merit publication.

CASE REPORT

A married woman aged 32 complained of a small area of varicose vein situated between the knee and the ankle of her right leg. This was not causing any inconvenience, but the appearance was aesthetically objectionable. The injection of 0.25 ml. of sodium morrhuate 5% into the vein as initial treatment caused no general disturbance. One week later 0.75 ml. of the same solution was injected. On this occasion the patient complained of giddiness after approximately two minutes. She then fainted; but she recovered rapidly, and the incident was considered to be due to excitement common to any injection.

The following week 0.75 ml. of the solution was injected into the section of the vein which remained unsclerosed. Once more nothing occurred for two or three minutes, when the patient fainted again. On this occasion, however, she did not recover consciousness as before, but sank into a state of deep coma. This rapidly merged into a generalized tonic spasm plus slight clonus of the facial muscles. At this stage the patient was pulseless and cyanosed. The tonic spasm persisted for about five minutes and then gradually changed into a state of semicoma. Vomiting now became severe and persistent, but the pulse was more satisfactory. The more anxious moments of the incident appeared to be passing.

The state of semicoma, however, persisted, and further improvement was barely appreciable for about half an hour. At that time it was observed that a complete hemiplegia had developed, involving the right arm, the right leg, and the left side of the face. The patient was then removed to hospital, still in a state of semicoma.

Two hours later the paralysis of the arm and leg had passed off, a limited degree of paresis of the left face still remaining. The patient was able to speak, but articulation was indistinct. In a further four hours the hemiplegia had completely cleared, tendon and surface reflexes were normal, and all movements were complete. Her speech had recovered and the mental state was excellent. Twenty-four hours after admission to hospital she was discharged, recovery being complete.

COMMENT

Alarming incidents following the use of sodium morrhuate have been reported occasionally in the medical press, but it is doubtful if the dangers of unusual sensibility to this common preparation are fully appreciated. A case of transient hemiplegia following its use must be exceedingly rare. The satisfactory outcome could not have been foreseen during the severe phase of the coma, and the clinical findings at that stage suggest that recovery was fortunate rather than inevitable. It would appear that the pharmacognosics of sodium morrhuate should be reassessed before its continued use as a sclerosing agent in the treatment of varicose veins be recommended.

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