

comedones without their usual distribution. Some thought it was due to an irritating substance contained in the lining of the hats. That might have occasioned it on the forehead, but it occasionally developed elsewhere on unusual parts—for example, on the legs. They were generally connected with special glandular structures undergoing rapid development, and it might be that some chemical alteration of the blood tended to produce them.

Acne vulgaris was distinguished by the comedones being inflamed, partly from some irritant in the already dilated gland, although this seemed hardly enough to account for the fact that only about one in twelve might be inflamed. The chief cause was believed to be irritation from the micrococci generally found on the skin, but which did not grow unless under some favouring circumstances, like dampness or friction. Their mere presence on the surface was not sufficient to excite inflammation, but when the skin was unhealthy and the nutrition lowered, or when the skin was subjected to injury or friction, then the inflammation began. The presence of saccharine materials in the blood had a great deal to do with the growth of these organisms in the skin, evidence of which was found in the occurrence of boils in diabetes, and he was persuaded that excess of sugar in the food had very much to do with suppurating skin diseases in children. This form of acne vulgaris might also be induced by food of a decomposing nature, and by materials which were produced and reabsorbed in the intestine, a circumstance which explained the well-known and recognised connexion between the severer forms of acne and a too rich diet, wines containing unfermented sugar and beer being notorious in producing the spots. When the inflammation spread to the surrounding connective tissues a very decided scar was left (acne indurata), a proof to some that the inflammation was set up by bacteria. In acne varioliformis it appeared like a small-pox pustule, and was exceedingly like a certain syphilitic affection of the face. Arsenical treatment of this form was valuable both as a means of cure and of diagnosis. The form called "acne artificialis" was due to irritants, either external, like tar, or internal, like the bromides and iodides, did not always start from comedones, and occasionally assumed such extraordinary developments resembling tumours as to lead some years ago to its description as a new form of disease.

The treatment was simple, but not always successful. Patients should be told to wash the parts at night with hot water, using a strong form of soap—soft soap in small quantities where the skin was thick. Friction with a towel should be applied to get the skin to act well and induce perspiration. If the comedones were abundant and were not removed by this, they might be squeezed out with any instrument which might be found suitable. Washing should precede the squeezing, and some lotion or application should be put on immediately afterwards, as the reappearance was due partly to the pressure irritating the neighbouring glands, and partly to some infecting material which spread over the skin. In acne vulgaris this should be supplemented by certain drugs, of which sulphur was by far the most efficacious. Absolutely dry sulphur did not affect the tissues at all, but only began to act when it was absorbed, probably in the alkaline form, and that seemed to be the reason why they found alkaline sulphur lotions the most effective. To meet this, sulphur and lime water were by far the most suitable, the strongest form of which was precipitated sulphur (fifteen grains), glycerine (half a drachm), spirit of camphor (five minims), and lime water to an ounce, which might be diluted if the skin was delicate. When the mixture had been kept a little while it would form a sulphuretted lime solution. The lime water was rather strong for some skins, and rose water might be added. This should be applied with a sponge, cotton-wool, or a rag, and allowed to dry, and then sponged off in the morning, and the skin should not then be washed. If ointments were used they should not be too strong. The sulphur ointment of the B.P. was far too strong for these cases; fifteen grains of sulphur to the ounce of soft paraffin or benzoated lard, with perhaps ten minims of carbolic acid added, would be found more suitable. In order to make it alkaline, fifteen grains of carbonate of potash might be added to the ointment. This treatment, though it might not entirely remove the disease in the case of young people, would succeed in curing attacks as they came on. If there was inflammation, the sulphur might be found too strong, and it would be necessary to use

the perchloride of mercury, half a grain, and almond emulsion to one ounce, which formed a very pleasant application. Lead or zinc lotions might be used where there was much inflammation, but lead was not a desirable application for the face, as gas sometimes caused it to turn black, and it should certainly never be used in combination with sulphur, a mixture which formed a favourite wash to darken the hair. Zinc and bismuth seemed to have equal effects on the skin; twenty grains of subnitrate of bismuth, one drachm of glycerine, and rose water to one ounce, or oxide of zinc might be substituted for the bismuth. In the internal treatment we were guided by the condition of the patient, and change of diet would in some cases be sufficient to stop the suppuration of the skin. Beer and sweet wines should be avoided, and patients should be kept very persistently on a purgative regimen. Magnesia and similar purgative salines were recommended in the form of Friedrichshall water as being very good for clearing the face. Sulphur internally was very beneficial and had a remarkable effect in acne indurata. In very anæmic people, iron combined with some laxative should be given. A mixture composed of two grains of sulphate of iron, five minims of dilute sulphuric acid, and twenty grains each of magnesium sulphate and soda sulphate, in an ounce of peppermint water, was exceedingly useful for these patients. Arsenic also benefited them and stimulated the skin. Some cases of this disease seemed to be benefited only by a good deal of really hard exercise. Gutta rosea or acne rosacea and its hypertrophic form were briefly alluded to. The outward manifestations of this form might be cured if they could not cure the original conditions. It occurred mostly in youth or middle life, and was related to derangement of some abdominal organ like the stomach or the uterine organs. A reflex hyperæmia was produced by dyspepsia or derangement of other organs, and on the basis of this other inflammations occurred, and were largely kept up by the presence of an irritating substance in the blood. In treating this form the internal organs should be examined; and if the stomach were deranged, bismuth was far more suitable than any other medicine whatever, and fifteen to twenty grains of the subnitrate two or three times a day, with tragacanth and peppermint water, might be given. A little carbonate of soda might be added, although it causes the mixture to effervesce while it is being mixed. If the menstrual functions were irregular, cure was not obtained until the morbid condition was set right. Dr. Jamieson of Edinburgh regarded bromide of potassium as being the best remedy. The external treatment should consist of mild bismuth or zinc lotions, and the pustules might be incised, and a very small quantity of carbolic acid or nitrate of mercury applied. After a little while a mild form of sulphur lotion was useful. The skin began to peel, and the disorder was cured. As regards acne rosacea hypertrophica, the treatment was entirely surgical. The lecture was illustrated by drawings.

CHLORALAMIDE AS A HYPNOTIC, WITH SPECIAL REFERENCE TO ITS ACTION IN THE INSANE.

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THERE is perhaps no therapeutic agent which attracts so instant and universal attention as a new hypnotic. This may be accounted for either by the fact that we have not yet discovered a perfect sleep producer, or because of the increasing demand for such drugs created by our present exciting, feverish, highly artificial mode of life, or perhaps both; but, whatever the cause, the fact remains, that no new drug receives that immediate and careful attention given by the whole medical world to "the latest hypnotic." Since chloral came (a gift from the gods) to replace as a hypnotic the time-honoured opium and its foster brothers, cannabis, henbane, and the like, many new preparations have been discovered and tried, with more or less success; yet, notwithstanding the fact that twenty years have passed since Liebreich introduced chloral, it has been only within the past few years that any preparation

has been discovered able seriously to contest the field with the drug now fast approaching its majority. Of all the somnifacients discovered of late years I should say that none is likely to prove a more certain sleep producer, and at the same time more innocent and agreeable otherwise, than chloral-amide, the last introduced hypnotic. This drug I have already administered over two hundred times, and, so far as I have been able to observe, its action is almost exactly that of chloral, minus that depressant action on the heart which renders chloral so dangerous in many, and totally inadmissible in such a large number of cases. This is but what we might expect from the composition of chloralamide, the formamide element as a stimulant counteracting the depressant action of the chloral. Kny of Strasburg has explained this absence of depressing action on the supposition that the free alkali of the blood splits up the chloralamide into chloral hydrate and formamide, and that the stimulating action of the latter counteracts the depressing action of the former upon the medullary, cardiac, and respiratory centres. In my hands chloralamide has proved as certain, though not as prompt, an inducer of sleep as chloral itself. In doses of from thirty to fifty grains it induced sleep in almost every case, even in patients suffering from extreme maniacal excitement, and in no case where it failed to induce sleep did it excite; in every case it calmed the patient more or less. From thirty-five to fifty grains were sufficient in nearly every case to give from five to ten or more hours' refreshing sleep, and fifty-five grains never failed to gain some sleep even in the worst cases—such as those passing through an attack of subacute mania, or those suffering from the excitement and restlessness following epileptic seizures. The sleep so induced was calm and refreshing, without being heavy, as shown by the fact that the sleeper could at any time be awakened and made to answer a question, protrude the tongue or the like. Sleep in most cases set in about from an hour to an hour and a half after taking the medicine, but in some cases it appeared as early as twenty minutes after taking the draught, while in others it was deferred for three hours. In two cases I noted that on the following day there was some little drowsiness, and in several cases it was remarked that patients slept on the next night following without any medicine, contrary to their custom. So far as my observations went, chloralamide did not in any way affect either pulse, respiration, or temperature. Although inquired after in every case there was no single complaint of headache on awakening, nor was there any appearance of those most disagreeable ataxic symptoms so frequently seen following the use of sulphonal. The appetite in all cases remained unimpaired—indeed, in three cases of melancholia the patients made flesh and improved somewhat rapidly in appearance while taking the drug. This was probably due to the rest of body and mind obtained, but it nevertheless proved that in these cases at least there was no gastric disturbance of any kind created.

In one case of general paralysis in its last stage thirty-grain doses only gained short periods of sleep accompanied by calm; and it is to be noted that in this case the first dose was followed by the disappearance of hiccough, which had persisted for over thirty-six hours—a not uncommon symptom in such cases. In a case of severe (climacteric) dysmenorrhœa in a sane patient a thirty-grain dose allayed to a certain extent the pain and induced a light sleep, frequently broken by the exacerbations of pain; but on following nights the dose was increased to forty grains, which gained from eight to eleven hours' unbroken and refreshing sleep. In another case, where the patient, also sane, suffered from facial neuralgia accompanying the menstrual flow, a dose of forty grains relieved the pain and gained a good and prolonged night's rest. These cases would tempt us to hope that in chloralamide we may find an allayer of pain as well as an inducer of sleep; but further experiment is necessary before anything definite can be said as to its analgesic properties. As will be seen from the brief notes of some of the cases given below, the drug acted almost equally well in all cases; indeed, Case 10, that of a phthisical chronic maniac, is almost the only one in which the result of a forty-five-grain dose was not favourable; and this case, if we exclude the mental element, would seem to bear out the experience of Hagen and Hufler, who found that chloralamide was frequently of little or no use in the insomnia of phthisis. One strong point in favour of the new drug is that, in every case in which it failed to induce sleep, it calmed the patient, rendering him less noisy, restless, and destructive; yet I must say that, in

maniacal cases, it did not appear to in any way reduce the excitement for more than an hour or two after the sleep induced had passed off. So soon as its hypnotic influence wore off, the excitement reappeared, and the patient returned to the condition present before the exhibition of the drug. In two cases of recurrent mania it did certainly appear to cut the maniacal period short, but of course it is impossible to say that this was really so. This want of prolonged calmative effect was well seen in an epileptic (Case 6), where, as a hypnotic, it acted remarkably well, but where the excitement always returned a few hours after awaking; yet in two other epileptics, where there were but sleeplessness and restlessness, it produced a certain amount of calm and restfulness on the day succeeding its exhibition. Moreover, in those cases of melancholia in which it was given, it seemed to have a soothing effect upon the mental symptoms after its hypnotic effect had passed off, lessening the restlessness and depression, and, as they ate well, causing a general, though slight, improvement in their bodily condition.

The result of my observations might be summed up thus: 1. Chloralamide is a very effectual hypnotic. 2. It appears to have no depressing effect whatever on the heart. 3. The dose is about thirty-five to forty-five grains; but fifty-five grains may be given with safety. 4. It should be administered an hour or an hour and a half before the time sleep is desired. 5. Its action is in some cases deferred so long as three hours, even in cases where it gains prolonged sleep. 6. No ataxic symptoms or headache follow its use. 7. It does not affect the digestive system. 8. It is a very useful and safe hypnotic, and may be given to paralytics whatever their stage. 9. In my opinion it is equal, but in no way superior, to paraldehyde, save that it is much pleasanter to take, and does not impart to the breath any such disagreeable odour as does the latter drug.

CASE 1.—Male, epileptic, aged thirty-four, with pneumonia. Restless and sleepless day and night. A twenty-grain dose after forty minutes produced sleep, which lasted only fifteen minutes. At 9 P.M. thirty-five grains were given; slept from 9 till 6.30 A.M. Same dose repeated on the following three nights with like success. Excitement wore off. Tongue cleaned and appetite improved. Recovered.

CASE 2.—Male, epileptic dement, aged seventy-four, with fractured humerus. Gets no sleep and is continually tearing off bandages &c., taking paraldehyde in eighty-minim doses with success. Chloralamide ordered in thirty-five-grain doses and continued for twelve consecutive nights without one bad night or restless day; no sign of tolerance being established; recovered.

CASE 3.—Male, general paralytic in last stage, aged twenty-nine. Out of bed all night. Hiccough, which had persisted for thirty-six hours. First dose of thirty-five grains did not induce sleep for three hours and a half, and then it only lasted two hours, but the hiccough disappeared and he was more restful. On the following two nights like doses gained four and five hours' sleep, and when not asleep he remained in bed. Next day vomiting of bilious matter occurred, and as he was sinking the drug was not repeated. Died two days later.

CASE 4.—Male, general paralytic dement, aged thirty-nine. Sleepless and restless day and night. In this case thirty-five to forty grains invariably gained from six to nine hours' sleep, and did not affect a large appetite.

CASE 5.—Male, chronic maniac, aged fifty; a physical giant, passing through one of his periodic attacks of excitement. Sings and shouts all night and tears everything to shreds. Ordered forty grains, and slept all night. Next night had same dose at 8 P.M. Slept from 11.15 till 6.30 A.M. Excited as before at 10.30 A.M.; dose repeated, and slept from 11. Was awakened at one and took good dinner. Slept again until 6 P.M., when he woke up and took tea. Afterwards he slept most of the night. Next night had no medicine and did not sleep. On the following nights forty-five grains procured from seven to nine hours and a half's sleep, and his attack was believed to be very materially shortened, while the usual loss of flesh and exhaustion were absent.

CASE 6.—Female, epileptic, aged twenty-three. Out of bed and shouting all night. First dose of thirty grains after half an hour gained one hour and a half's sleep, after which she was about her room and talkative. Same dose procured several hours' sleep next night, and the excitement abated. Nine days later, after having fits, she had another attack of excitement. After two noisy nights thirty-five

grains were given at 12.15 noon. Went to sleep at 3.15 and slept till 8.30 next morning—seventeen hours and a quarter. After seven hours' sleep she was shaken and answered questions and protruded the tongue. At the end of the seventeen hours and a quarter's sleep she awoke, with clean, moist tongue, and took good breakfast; calmer. On the next night thirty-five grains gained twelve hours' sleep, but on the following evening the noisy excitement returned, and the drug had to be repeated.

CASE 7.—Female, aged forty-four; recurrent mania. Sings and screams all night. A thirty-grain dose produced only two hours' sleep, but she was quiet all night. Next night thirty-five grains gained three hours and a half's sleep, and on the following night a like dose induced sleep lasting seven hours and a half. This dose was repeated on nine consecutive nights, and usually induced sleep in about an hour and a half, which lasted from four to six hours; dose then increased to forty grains, upon which she slept as a rule from seven to nine hours, but during the day she was excited and violent (and also stronger) as when without medicine, and getting no sleep.

CASE 8.—Female, aged sixty-eight; relapsing mania of nine years' standing; passing through one of her acute attacks. In this case the excitement was extreme. Doses of forty-five grains were repeated nightly for fifteen nights, and generally procured from six to nine hours' sleep. The excitement always returned by noon. On the eighth day she was purged; drug continued and diarrhoea disappeared. On the sixteenth night eighty minims of paraldehyde were given, without sleep; the following night forty-five grains of chloralamide gained seven hours' sleep.

CASE 9.—Female, aged thirty-seven; relapsing mania; passing through period of excitement. At first, when excitement was at its height, forty grains produced calm and quiet, broken sleep, and as the excitement wore off she slept on the same doses from seven to nine hours. Attack noted as materially shortened.

CASE 10.—Female, aged twenty-one; phthisical and emaciated; a chronic maniac; reported noisy every night for weeks past. A thirty-grain dose was first tried, and after an hour she slept a little over an hour, and was quiet the remainder of the night. Dose increased to forty and forty-five grains with little success. She never got more than two or three hours' unbroken sleep. Appetite not impaired.

CASE 11.—Female, aged thirty-four; continued subacute mania; indecent and filthy in habits; violent and destructive at times. A thirty-five grain dose procured broken sleep, with continued quiet. Forty grains, after from thirty to forty minutes, gained usually from four to six hours' sleep, and during the remainder of the night she would be quiet. When the dose was increased to forty-five grains she slept from eight to ten hours, but during the day the excitement continued.

CASE 12.—Female, aged sixty-five; acute melancholia; she moans and prays continually when not asleep. Doses of thirty grains on first four nights gained only from three to five hours' sleep, but afterwards the same doses procured from seven to nine hours' sleep, and she gained strength and flesh. Later still forty grains induced sleep, lasting from eight to ten hours. Depression somewhat reduced.

CASE 13.—Female, aged fifty-four; melancholiac; gets very little sleep; groans continually when awake. In this case thirty-five grains would procure from seven to nine hours' sleep; the next night she would sleep five or six hours without medicine; and the third night she would be sleepless again, and so on. With doses on alternate nights she slept fairly well, ate better, improved bodily, and was less depressed during her waking hours.

CASE 14.—Aged forty-six; sane; dysmenorrhoea; had no sleep for some nights. Dose of thirty grains. Slept all night, sleep coming on an hour and a half after taking medicine. Bright and cheerful next day; no headache. On the following night no medicine, and only slept an hour and a half. Next night thirty-five grains induced sleep, which was broken by exacerbations of pain. Two nights later the same dose gained ten hours' sound sleep.

CASE 15.—Female, aged forty-six; melancholiac. When about to go to sleep feels as if the bed was sinking under her and starts suddenly. Gets little sleep and looks very dull. In this case thirty-five grains invariably induced from seven to ten hours' sleep, after which she was more bright and cheerful.

CASE 16.—Male, aged thirty-five; melancholiac. Most determined suicidal impulse. He seldom gets any natural

sleep. In this painful case from forty to forty-five grains invariably procured from seven to ten hours' sleep, which set in about an hour after taking the drug. After taking chloralamide for twelve consecutive nights he looked rather better, and was somewhat less miserable and depressed.

CASE 17.—Female, aged thirty-seven; a most violent and destructive chronic maniac. Could only be induced to take medicine at times. When she did take it forty-five grains procured about five or six hours' sleep, and she was calmer on the following days.

CASE 18.—Female, aged thirty-six; melancholiac, with stupor. Refuses her food. In this case thirty-five grains gained from five to eight hours' sleep, and forty-five grains from eight to ten hours. The appetite improved, and the depression became less extreme.

CASE 19.—Male, aged fifty-one; acute melancholia, greatly emaciated. Has to be fed. Delusions of poverty. Will not lie in bed because he cannot pay for it. First dose of thirty grains only induced sleep after an hour of fifteen minutes' duration, but same dose repeated at night, nine hours after first dose, gained a good night's rest. Next day he was more easily fed, and did not moan and complain continuously as before. For twelve consecutive nights forty grains procured unbroken sleep of from eight to ten hours' duration, and the mental state improved somewhat, also the bodily.

CASE 20.—Female, aged sixty-two. During an attack of subacute excitement, with sleeplessness, forty grains procured about eight hours' sleep to herself, and peace and quiet to those around.

CASE 21.—Male, aged nineteen. Sudden outbreak of maniacal excitement. Forty grains were given, and he slept nine hours, after which he was calm and tractable. The excitement did not return.

CASE 22.—Male, aged fifty-six. Continued subacute mania. Auditory hallucinations, and talks until hoarse. In this case forty-five grains always procured a good night's sleep of from eight to ten hours, but during the waking hours he carried on a continuous conversation at the top of his voice.

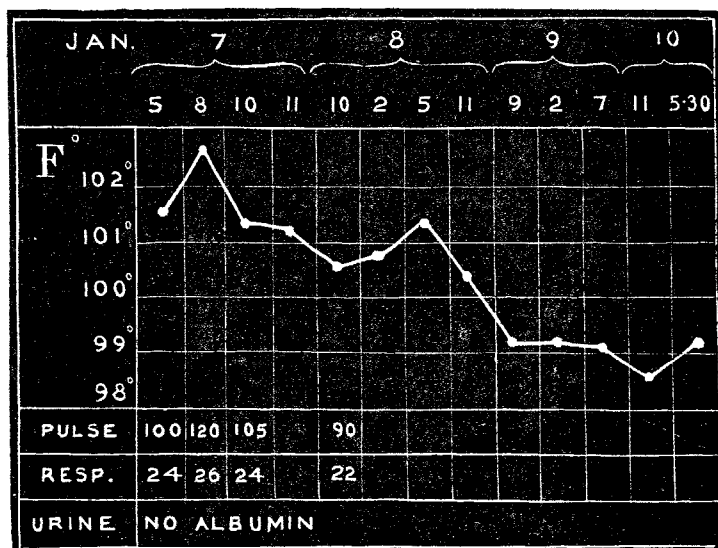
CASE 23.—Female, sane, aged nineteen. Facial neuralgia. Menstruating. Thirty-five grains at bedtime relieved pain, and procured a good night's rest. Neuralgia did not return. Northampton.

RANGE OF TEMPERATURE IN INFLUENZA.

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CASE 1.—A. K—, female. Appeared ill on Jan. 7th, but did not complain of anything until between 1 and 2 P.M. She then complained of pain in the back, frontal headache, itching of eyelids, lassitude, and frequent micturition. Her temperature between 2 and 3 P.M., before she went to bed,

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was over 100°; pulse nearly 100. She felt cold, but had had no shivering. The patient was put to bed, and ordered salicylate of soda (ten grains) every two hours for four doses. Soon after the first dose the headache was relieved, and after the third the temperature began to fall, and the skin