PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

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LECTURE III.

Cases of idiopathic erysipelas of the head; history of the cases; varieties of erysipelas; principles of treatment, the same in all; characters of the erysipelatous inflammation; concurring conditions; symptomatic fever, for the most part asthenic.—Treatment, local and general; varieties of local treatment; advantages of nitrate of silver; general principles of the general or constitutional treatment; effects of mercurials, cathartics, colchicum, ammonia, opium, and stimulants.

Gentlemen,—The last fortnight has brought into my hands three cases of idiopathic erysipelas of the face, head, and scalp, all admitted within a few hours of each other; two of them occurring in the same family, a father and daughter; the third, however, from a different and distant locality, so that the idea that would present itself immediately to the mind of a contagionist, that of a common or contagious origin, by which is meant an emanation of imaginary germs, or germinal entities, given off from the body of one and inoculating another, cannot be maintained. Particular periods of the year are more favourable to the development of erysipelas than others, and to this fact we must refer the appearance of these cases simultaneously. Let us first turn to the record of these cases in the ward books.

CASE I.

W. M——, aged 43, a tailor by trade, was admitted into the hospital on October 17th. He had felt unwell for the last two weeks; anorexia and debility; within the last four days had some sharp rigors, accompanied by severe headache. Three days since first felt uneasy sensations about the face and scalp, the cheeks, forehead, and eyes, becoming swollen, sensitive, with burning heat and pricking sensations in the cuticle. Co-existent with this condition of the face were erratic pains in all his limbs, and more particularly in his loins. On admission the features were obliterated and obscured by an extensive erysipelatous inflammation, which had involved them all in a general tumefaction; this extended upwards to the scalp as far as the sin-ciput, and below to a few lines beneath the chin; laterally the ears were involved, the cartilages of which were much swollen, and had already begun to vesicate. The entire surface occupied by this erysipelatous condition was of a dusky-red colour, extremely sensitive

to the touch, and of glistening aspect, and conveying a constant burning sensation to the patient, the colour rapidly disappearing under the pressure of the finger, and as rapidly returning, and the inflammatory redness and tumefaction was marked out by a well-defined line, clearly distinguishing the affected from the non-affected parts of the skin. The pulse was 120, sharp, and cordy; the tongue was morbidly red, dry, and papillated; the skin was hot, and deficient in secretion; there was urgent thirst, and the lips were parched, and cracked; there was no abdominal tenderness, and there had been no vomiting; the intellect was unaffected. The patient was placed in a hot bath, and his sensations craving for warmth to the head, the parts involved in the erysipelatous inflammation were, on his being placed in bed, wrapped in hot moist flannels, which were directed to be frequently renewed.

R. Hydr. Chloridi, gr. iv.; Pulv. Rhei, gr. x.; statim. Mist. Ammonia Acetatis, oz. j., quartis horis. The erysipelatous surface was well rubbed over with the nitrate of silver.

18th. He had passed a good night. The bowels had been well relieved, the pulse had become softer, the skin had fallen in temperature, the erysipelatous surface was not so sensitive and there was a diminution of the sensation of burning heat. There was still great thirst, and although the bowels had moved freely, the dejections indicated the further use of cathartics; tongue still red and dry. Haust. Colchici Co. oz. j., bis die donec alvus bene responderit. Pulv. Ipecacuanhae Co., gr. x., hac nocte.

The following night was passed with some sleep; there has been no delirium since admission; the bowels acted freely; tongue moist at the sides; tumidity of the inflamed parts much diminished, and sensation of tension relieved. The erythematous inflammation of the scalp had migrated posteriorly to the occiput and crept downwards, and this morning it was detected at the back of the neck, descending nearly on one side to the ridge of the scapula. The nitrate of silver was assiduously applied to the sound skin, marking out a boundary line; the inflamed surface was also rubbed over. Mist. Salina Ammonia, quartis horis. White wine, oz. iv.; beef tea.

20th. He passed a quiet night; the tension, tumidity and tenderness of all the affected parts had much abated; the cuticle on the cheeks was desquamating; the pulse had fallen to 92, and indicated much more power; the tongue had become moist; the bowels acted freely; dejections more natural; there was less thirst, and less febrile heat of surface.

During the 21st and 22nd, the symptoms gradually

mitigated; some restlessness was allayed by Dover's powder at night. The erysipelatous surface gradually lost its œdematous condition, and the cuticle everywhere freely desquamated. The application of the lunar caustic had checked the progress of the inflammation posteriorly.

On the 23rd, debility and great prostration were the principal symptoms recorded; the tongue had become quite moist, and had lost much of its morbid redness; the tumefaction of the face had subsided sufficiently to develop the character of his features, and the skin, except under the eyes, had returned to its natural colour, except the detached cuticle, which here and there indicated the severity of the departed inflammation. *R. Inf. Cinchonæ, oz. j.; Acidi Nitrici dil, m. x.; ter die.* Wine reduced to two ounces.

On the 25th, was reported convalescent, except that, under the lower right eyelid, the cuticle still continued of a dusky dirty red, which you will recollect gave me the opportunity to observe at the time, would in all probability terminate in purulent deposit.

On the 26th, this had become much more swollen; pulpy, or boggy, in its impression conveyed to the finger. I directed Mr. Butler, the clinical assistant, to open it freely with a lancet, and he obtained more than a teaspoonful of healthy pus. The precaution was not taken of laying a shred of lint within the opening, the incision consequently closed in a few hours, and on the 27th you saw that this minute abscess had filled again, and again required the assistance of the lancet.

This patient quickly recovered his appetite and strength and is now convalescent.

Before offering you some remarks on the nature of erysipelas and its treatment, I wish to recall your attention to the symptoms of the two other cases of idiopathic erysipelas that were under treatment at the same time.

CASE II.

This is the case of the daughter of the last patient, living in the same house; she was taken ill about the same time, and admitted into the hospital on the same day with her father. She is about twenty years of age. On admission into St. Margaret's Ward, no history of her previous symptoms could be obtained, as she was in a comatose state, from which she could be with difficulty aroused sufficiently to protrude the tongue when desired; but no greater evidence of consciousness could be obtained. Erysipelatous inflammation occupied the face and scalp; its accompanying œdema obliterating the features, closing the eyes, and involving the whole in a shapeless swelling; the inflamed skin of a dirty-red colour, intensely hot to the touch, and causing the patient to shrink. The surface of the cheeks and the ears presented the appearance of ruptured vesication; the lips were unusually tumid; the pulse 116, sharp and thready; the tongue foul and dry, morbidly red and papillated; the lips were parched; the skin hot and dry; there was no abdominal tenderness nor tension; there had been vomiting since admission; and the bowels had acted freely, though offensively; the intellect was torpid. *Balneum calidum; Mist. Ammoniac Acetatis, oz. j., quartis horis. Hydr. Chloridi, gr. ij.; Pulv. Rhei, gr. x.; statim.* The head

was enveloped in hot flannels. The entire erysipelatous surface, except the parts that had vesicated, were freely rubbed with the nitrate of silver.

On the 18th the report states that she had passed a restless night; much wandering; constant efforts to get out of bed; fretfulness, and general uneasiness; the pulse, however, had become softer, 108; the temperature of the surface was not so great; but the tongue still indicated a typhoid tendency, sordes collecting upon it, and around the teeth; the bowels acted freely; the urine was copious in quantity, but loaded with urates. She was ordered the *Mist. Salina Ammoniata, oz. j., tertiis horis.* White wine, oz., iv., with white-wine whey, beef-tea, &c., &c.

At 3 p.m. this day, the delirium had augmented in intensity; the tongue was dry and chapped; the portion of inflamed cuticle under the influence of the nitrate had become less tumid and sensitive, but the erysipelatous line had extended downwards under the chin, and had reached within half an inch of the clavicle of the left side. The nitrate was applied to the sound skin, and an eschar raised. *Pulv. Ipecac. Co., gr. x., hora somni;* and the Ammoniated Saline to be continued.

19th. Had passed a quiet night; the opiate had evidently diminished the irritability of the frame; consciousness had returned, and she was evidently better; the tongue had become moist at the sides; the pulse had fallen to 102, and was expressive of more power; the erysipelas had extended to the line of demarcation marked out by the nitrate, but not beyond it; the tumidity and tension of the parts first affected had greatly diminished, and desquamation was proceeding on the scalp and forehead; but on the next day it was discovered this specific inflammatory condition of the cuticle had wandered backwards to the nape of the neck, and had travelled over parts that had not been cauterised, and had descended as low as the space between the scapulae. The nitrate checked its advance in this direction.

On the 21st the symptoms had much abated; the tongue had become moist; skin cool; bowels acting moderately; no stupor, and some refreshing sleep; the inflamed parts desquamating freely. The next two days exhibited evidences of much prostration, and she was placed on an increased amount of nourishment, with bark and acid.

On the 23rd the pulse had fallen to 90; the tongue was clean and moist, and there was a natural desire for food, and her strength gradually returned.

One circumstance observed during her convalescence is worthy of note. The right eye had, for some days after all tumefaction of the face had subsided, exhibited a deep blood-shot appearance, and the congestion was sufficiently intense to inject the vessels of the lower palpebra to such an extent as to cause a protrusion of lax cellular tissue above the lower lid; and inferiorly towards the outer canthus, a round yellow tumour about the size of a pea appeared. I considered at once that this was a similar collection of matter, in the shape of a small abscess, in the cellular tissue. A cataract needle was first introduced, and a drop of purulent matter was obtained. I then directed Mr. Butler, our very intelligent clinical assistant, to open this tumour with one of the angular-shaped cataract knives, known as *Beer's*. By this operation about

half a drachm of creamy healthy pus was obtained. No further symptom checked her recovery, and this patient also is now convalescent.

CASE III.

The third case was also admitted on October 17th, and is that of a girl, aged 18, a servant in a tradesman's family. She exhibited all the ordinary premonitory symptoms of anorexia, debility, rigors, headache, and wandering pains in the limbs. The erysipelas in this case at first occupied only the right side of the face, involving the ear, cheek, eye, and partially the forehead and scalp; the lip was, however, much tumefied; the skin was hot, sensitive, and conveyed to the patient sensations of burning, heat, and tension. The intellect in this case was throughout unaffected; the pulse was 140, soft, and compressible; the skin of an intense febrile heat; tongue red and dry; lips parched; much thirst; no vomiting; no abdominal pain or distension; bowels well moved; great physical prostration. Hot baths; head to be wrapped in hot, moist, flannels. Nitrate of silver freely applied to inflamed parts; ammoniated salines, with a mild mercurial alternative.

On the next day the pulse had fallen to 110, and the other symptoms were much mitigated; less thirst, with a moister tongue. There had been vomiting during the night of a light bilious fluid; bowels torpid. Hydr. Chlorid., gr. iv.; Pulv. Rhei, gr. x.; statim. An oleaginous enema to relieve the bowels, and *Haust Colchici Co., pro re nata.*

On the 19th the erysipelas passed over to the left side of the face, but was checked there by the nitrate. Skin still above the ordinary standard; tongue dry; and symptoms not so promising as yesterday; the bowels, however, were freely moved in the afternoon, with much benefit to the general condition of the patient. On the evening of this day she began to flag, the pulse becoming very small, 120, and the tongue dry and parched, with some restlessness of manner, although no delirium. Some wine was given her, and Pulv. Ipecac. Co., gr. x.

The two next days exhibited a still greater tendency to typhoid symptoms; the intellect became confused; there was some muttering, and much restlessness; the bowels acted moderately. The stimulants were increased, and she had Pulv. Ipecac. Co., gr. xv.; Potassæ Nitratis, gr. v. This procured sleep. During this period the cuticle was desquamating on the cheeks, but the erysipelas was creeping along the scalp, and was only retarded by the use of the nitrate, which, wherever applied, immediately checked its onward course.

On the 23rd, the restlessness had yet to be combated by opium, and there was yet much febrile disturbance; the pulse continued low; the tongue moist at the sides, but dry and brown in centre; the bowels acted freely, but the secretions were offensive, and required mercurials to improve their condition. She was now ordered the Infusum Cinchonæ and dilute Nitric Acid. The appetite began to improve, the restlessness to diminish; the cuticle freely scaled off from the previously inflamed parts, and she proceeded onward to convalescence without a check.

These three cases of erysipelas afford me an opportunity to explain to you the special characters and treatment of this disease. In the course of your clinical observations in this hospital, you will have

occasional opportunities of witnessing the peculiar features of two kinds of erysipelas, differing only in their cause,—the idiopathic and the traumatic. Under these two divisions, some authors have comprehended the several species of this exanthematous disease. The first comprises all those varieties of erysipelas that arise from constitutional causes; the second, as its name implies, all those arising from external injury. One class you will see treated in the physician's hands, the other in the surgeon's; but, nevertheless, you will find, that whether the case be surgical or medical, idiopathic or traumatic, the treatment being based on broad, general, and acknowledged therapeutical principles, will, in each class of cases, be for the most part the same. It is only when such cases fall into the hands of those who are unable to grasp the catenation of phenomena, successively developing themselves as a series of correlative effects, that we witness a departure from general rules of treatment, and the patient placed in jeopardy by a feeble practice, and inert and inapplicable remedies. Different writers have classified the various forms of erysipelas into several species: thus we find them speaking of the simple, the erratic, the phlegmonous, the œdematous, the gangrenous. But these terms do not imply different species of erysipelas, but for the most part merely express the relative intensity of the same disease in different individuals. The simple often passes into the erratic, and thence into the œdematous, and the phlegmonous is not only often times œdematous, but not unfrequently ultimately terminates in the gangrenous. These terms are, moreover, confusing to the student; for by them he is led to the notion of distinct varieties, instead of different degrees of the same disease. The term erratic, only expresses one of the universal characters of erysipelas, and not the specific distinction of a separate form; it is true, that in some individuals the tendency to migratory extension is greater than in others, as in Case 2, but this condition does not therefore separate its identity from the others. Again, œdema is to a greater or less degree an invariable accompaniment of every form of erysipelatous inflammation, and results from serous infiltration of the subjacent cellular tissue, consequent on the intense inflammation of the true skin. The extent of this œdema varies in different cases, but this is not sufficient to constitute a distinct variety.

The most practical subdivision is into idiopathic and traumatic; the first having reference to erysipelas as arising from constitutional causes only; the second as dependent exclusively on external injury. Each of these classes may recognize certain terms expressive of relative intensity, as the simple, with or without vesication, with more or less œdematous infiltration, and consequent tumidity and termination in desquamation of the cuticle and resolution; or the phlegmonous, where the inflammatory condition is more intense, and with an obvious tendency to *purulent* infiltration in the subjacent tissues. A few degrees of greater intensity, and this form rapidly passes into the gangrenous. The cases which you have had under your observation during the last fortnight, belong to the class of simple idiopathic erysipelas, with the ordinary amount of œdematous infiltration, a local tendency to the formation of pus, and accompanied from the first with the usual symptomatic fever of the æsthenic

or adynamic kind. Practically, it is of some importance that you should have had the opportunity of witnessing and comparing together these cases of idiopathic erysipelas, attacking individuals differing in age, constitution, and habits of life. You have had the opportunity of testing the truth and reality of the doctrine so prominently laid down by some writers, that age and habits of life are powerfully modifying circumstances,—that special respect must be paid to them; but here are three cases of erysipelas, two occurring in young women—the one of a spare and youthful aspect,—the other more robust and inclined to obesity; and a man, the father of one of the females, of a strong, vigorous constitution, in each of whom the type of the symptoms has been similar, notwithstanding this disparity in constitutional habits, and whose cases have each required the same modified antiphlogistic, I may almost say, stimulating and tonic, mode of treatment.

Erysipematous inflammation presents us with a series of phenomena expressive of true specific inflammatory action; the incipient symptoms, the *rubor, calor, tumor* and *dolor* declare this; and the subsequent effects—vesication, desquamation, purulent infiltration, or even gangrene make up the expressive category. In idiopathic erysipelas the symptomatic or accompanying fever is by no means always proportioned to the extent of surface over which the inflammation spreads, although in all probability it is allied to, and dependent on, the intensity of the inflammatory action. The febrile symptoms in Case 2 were equally urgent as those in Case 1; yet in the latter, the erysipematous inflammation not only occupied the entire face and scalp, but migrated in front as far as the clavicles, and posteriorly, had unperceived crept down between the scapulæ. In Case 3, the erysipelas, at first confined to the right cheek, only partially affected the left side of the face, and never passed further than the sinicuput upwards; yet the febrile symptoms were most urgent in this case.

Whether the constitutional disturbance stands to the local cuticular inflammation in the relation of effect and cause—that is, whether the fever be produced by the specific inflammation in the skin, or, *vice versa*, is a vexed question which need not occupy our attention now; for I do not wish to distract your attention from the legitimate objects of clinical observation, by a reference to matters purely controversial and speculative. We will simply consider these cases as they present themselves to us, exhibiting conditions of specific inflammation of the skin, with a large amount of symptomatic fever, rapidly assuming the asthenic or typhoid character.

I wish first to direct your attention to the local treatment; we will subsequently consider the constitutional. Among external remedies calculated to impart relief to the distressing sensations suffered by the patient, from the burning heat and tense state of the cuticle, none more certainly attain the object than hot fomentations. Hot and moist applications would seem to act mechanically on the distended cuticle, softening and relaxing it, and relieving it of that tension which causes the sensation of tightness and pricking shooting pain. Water of any temperature would effect this object; yet, for the most part, hot appliances are preferred. No rule need be laid down upon this point, for the

feelings of the patient are the best guide to our selection of hot fomentations or cold lotions. In the majority of cases hot applications are preferred, the patient expressing an instinctive horror of cold. In some a decided preference is manifested for cold. The best method of applying the hot fomentations is to wring a large soft flannel out of hot water, and roll the head in it, bringing it round over the face, so that no impediment be presented to the breath, but at the same time the whole erysipematous surface is invested in this hot moist atmosphere. Much relief is obtained to the painful sensations of the patient by these means. Of cold applications, linen or lint, dipped into cold spring water, and frequently renewed, is the simplest and best lotion. An evaporating lotion may be made by the addition of spirits, but this is not necessary. With respect to the use of ice and ice-cold water, judgment is required, for the vital energies of the skin in erysipematous inflammation are reduced so low, that a temperature of 32° continued for any length of time, would effectually deprive the part of its vitality, and quickly bring on gangrene. The best practical rule in reference to the use of ice in erysipelas, is to limit its application to the scalp, which, being defended more or less by hair, is not so susceptible to the influence of a low temperature, and to confine its use to the cases in which phrenitic symptoms of much urgency co-exist; for here the meninges of the brain become secondarily effected, and violent paroxysms of raving, wild, uncontrollable delirium, declare the amount of cerebral derangement. The symptoms in such cases are much mitigated by applying ice to the scalp, or laying the head for a short time in a kind of ice pillow, made by introducing pounded ice, with a little water, into a large sized bladder, and laying the head on it. The cases, however, now under consideration, present you with examples of the relief obtained by hot fomentations.

The nitrate of silver has been used freely to the erysipematous surface in each of these cases, and with the effect of cutting short the inflammation, by setting up an action different from, and incompatible with, the specific action of erysipelas. That it does cut short the inflammatory condition of the skin is proved by the absence of vesication when it is applied in time, the cuticle subsequently merely desquamating. That the action of the nitrate of silver on the skin is incompatible with erysipematous inflammation is also testified by the fact, that the disease will not extend itself beyond a line marked out by the lunar caustic. Advantage is taken of this fact to prevent the erysipelas extending, by surrounding the inflamed parts with a cauterized line of demarcation. The second case illustrates this fact:—Two days after admission, the erysipelas exhibited a tendency to extend downwards below the chin, and had reached to within half an inch of the clavicle of the left side. The healthy skin was freely cauterized by the nitrate about a quarter of an inch beyond the line of inflammation; the shoulders and neck posteriorly were in like manner marked off, but the hollow space between the scapulæ had escaped the touch of the nitrate, and the next day upon examining the patient the progress of the erysipelas had been confined within the boundary line, except that spot which had inadvertently escaped the action of the caustic; there the inflammation had crept

along, being checked right and left by the caustic line, but proceeded downwards in the direction of the spine, through the passage left for it by the interruption of the continuity of the cauterized barrier. It was remarkable to witness the erysipelatous inflammation, like a burning torrent, holding on its course unimpeded through this narrow outlet, till again damped and extinguished by the effectual quenching of the nitrate.

There are some cases, however, in which it is less advisable to use the nitrate, than to depend upon free incisions made with a lancet, scoring the skin in parallel lines, and sufficiently to abstract blood freely for the relief of the fulness and distension. This course is especially necessary when the appearance of the skin indicates a more intense degree of inflammation, of a more palpable phlegmonous character, and certain, if not by this means relieved, to terminate in suppuration and purulent infiltration in the subjacent cellular tissue. This practice may appear severe, but it is not so, it quickly affords relief, and saves much subsequent pain and trouble.

In cases of idiopathic erysipelas, particularly of the face and scalp, purulent infiltration is rare, and confined to those spots where the cellular tissue is lax, such as in the palpebræ, either above or below, and it never exists to the extent that is witnessed in traumatic erysipelas. When matter is likely to form in the spots just indicated, it may be suspected when the cuticle remains of a dusky-red hue, and tumid, after the surrounding parts are desquamating, and have lost the previous redness and œdema; the part has an elastic, almost boggy feeling, to the finger. This little abscess should be at once opened by a free incision, and its contents thoroughly emptied, and a pledget of lint layed on with moderate pressure; this causes the sides to unite, and prevents the re-filling of the sac with pus, which it is certain to do if pressure be not made. If this be not done, the edges of the opening may be kept open for twenty-four or thirty-six hours, for it is only by one or the other of these means that a second opening can be prevented. The cases of both the father and the daughter exhibit the peculiarity of these purulent collections. The situation of the minute abscess in the outer canthus of the eye, embedded in the loose cellular structures of the lower lid, was singular.

The constitutional or internal treatment of these cases partook of the modified antiphlogistic character. Cases of erysipelas in the metropolis will rarely bear depleting remedies, or severe antiphlogistic treatment; general blood-letting is totally out of the question. Mercurial alteratives, with occasional brisk purgatives in the earlier periods of disease, carefully supporting the system, if necessary, by wine or ammonia, is a general summary of the internal remedies required.

The chylopoietic viscera are always irregular in function and secretion, and require the agency of mercurial purgatives; these unload the bowels, relieve the biliary congestion, and improve the aspect of the dejections. Brisk saline purgatives, co-operating with the mercurials, so that they be not pushed too far, are of great utility. Colchicum in combination with a neutral salt and magnesia, is in my experience the best form of cathartic. The action of colchicum is developed principally on the duodenum; it stimulates the hepatic ducts, cleanses this portion of the intestines of mucoid accumulations, modifies the accompanying

fever, diminishes the heat of skin, relieves the local turgescence, and furnishes other indications of amelioration. Two or three good purgative actions are generally sufficient, for hypercatharsis must be carefully avoided. The form in which I usually prescribe colchicum, is the *Hausus Colchici Compositus* of our *Hospital Pharmacopœia*. Vin. Colchici, dr. ss.; Solut. Magn. Sulph., dr. iij.; Magnesiæ Carb., gr. xx.; Aquæ Menthæ Pip., oz. j. M. Fiat haustus.

Two or more doses of this saline readily obtain the desired effect. Case 1, illustrates the good effects of purging with the colchicum draughts. On the 18th the bowels were torpid, evacuations offensive and dark, the tongue red and dry; two of the above draughts induced free action from the bowels, the tongue became moist, and there was a general diminution of all the febrile symptoms, and the local heat and tension were much mitigated.

The type of the fever in the majority of metropolitan cases is unquestionably of an asthenic order, ammonia and other stimuli becoming necessary oftentimes in the early stages of the disease. With respect to the proper period at which stimuli should be administered, it is difficult, I may say impossible, to lay down any special rules applicable to all cases; each case presents its own peculiarities and indications on which the necessity for wine must depend. In rural districts, among a hardy and robust population, general depletory measures, and an antiphlogistic treatment throughout may be advisable, but in the metropolitan districts the febrile symptoms early indicate want of power, and the necessity for support and stimuli.

Opium exercises a most beneficial influence wherever irritability, restlessness, and delirium, are the concomitants of fever. You have seen in the progress of these cases how serviceable it has proved in allaying the delirium, restlessness, and vigilance, so common in the fever of erysipelas. The *Pulvis Ipecacuanhæ Comp.* is, in most cases, the best form in which opium can be given, from its developing a secondary influence over the skin. Opium does not act merely as an hypnotic, or as an agent only to procure sleep; it lessens the irritability of the system generally, husband the physical power, and gains time for remedies to operate, and the functions to be restored to their normal state. It has been already observed, that diffusible and vinous stimuli are important and essential remedies, so soon as the pulse and tongue indicate the approach of a typhoid condition. Ammonia is best given, as the sesqui-carbonate in the *mistura ammoniæ acetatis*, or effervescing draught, formed by twenty grains of the sesqui-carbonate with two teaspoonfuls of lemon juice. The tongue becoming moist, the skin cool, and the pulse lowering in frequency, express a remission of the adynamic state. Of vinous stimuli, it is hardly necessary to specify any particular kind: port wine or brandy are those most usually employed.

The convalescent stage of this affection differs in but little from similar periods of other fevers. Cinchona bark-tea, with a mineral acid, forms the cheapest and most effective tonic, prepared by pouring a pint of boiling water on an ounce of the bruised lance-leaved bark, the water being first acidulated with three drachms of the dilute sulphuric acid. It differs from the *Infusum Cinchonæ* of the *Pharmacopœia* only, in

the maceration with acidulated water, the object of which is to render the *kinato* of *chinchonine* more readily soluble. You will find this tonic economical, and quite as efficacious in the convalescent periods of most acute diseases, as the more expensive preparation of quinine.

CURSORY REMARKS ON RECOVERY FROM ACCIDENTS AND SURGICAL OPERATIONS.

By EDWARD COPEMAN, F.R.C.S., Coltishall.

The case of compound dislocation of the ankle, lately reported in the *Provincial Journal*, is a striking instance of rapid recovery from accident, effected by the *vis medicatrix nature*, but it would not be difficult to adduce numerous proofs of the power of this mysterious agency. One other instance which lately occurred in my neighbourhood, it will not be impertinent to relate.

A middle-aged man, thin, and not of very healthy constitution, met with a frightful accident when attending to a cow that had just calved. Whilst he was stooping to give her some water, the animal tossed up her head suddenly, and one of her horns entered the man's mouth, tearing up the cheek in a jagged and irregular manner, from the angle of the mouth to the malar prominence in one direction, and across the top of the nose in another. The wound was a very unsightly one, implicating the entire thickness of the cheek. There was free bleeding, and considerable contusion. I closed the wound accurately with eight or nine interrupted sutures, covered it with lint, and applied cold water to the whole side of the face. I did not disturb it for several days, and, at the end of a week, there was scarcely anything to be seen but a linear cicatrix, marking superficially the course and extent of the wound. It healed beautifully, without any deformity.

Were we to speculate upon the reasons for the exemption from severe symptoms enjoyed by many who meet with grave injuries, I think we might fairly assign a prominent position to a country residence, and after this to the non-removal of the patient from his family and home. The subject of the dislocation of the ankle above referred to, positively refused to be sent to the county hospital, owing to a prejudice that is not uncommon amongst certain of the lower classes, against those excellent institutions, and it added no little to his comfort and tranquillity to be nursed and attended, during his confinement, by his friends and relations. What is true with respect to recovery from accidents, is also equally certain with respect to recovery after surgical operations; the causes above referred to seeming, as it were, to compensate for the smaller degree of surgical skill necessarily attainable by those whose lot it is to practise in rural districts. A few instances I shall proceed briefly to describe:—

I. In April, 1839, a man, aged 76, had his fore-arm severely injured by cart-wheels; soft parts considerably lacerated; ulna broken in several places; lower end of radius fractured; wrist-joint open, and filled with gravel and dirt; muscles, nerves, and interosseous ligament extensively torn. When I saw him, a few hours after the accident, the injured integuments were of a greenish hue; the pulse very feeble; the patient

much prostrated; and I looked upon the case, under any treatment, as quite hopeless. I gave him brandy and laudanum, and he then somewhat rallied; but he suffered severe pain, and begged hard to have the limb removed at all hazards; his friends also were in favour of the operation; and, apparently with very little probability of success, I amputated below the elbow. In order to get the operation over as quickly as possible, I retracted the integuments forcibly with my left hand, and cut directly down to the bones with a single circular incision. Scarcely any blood was lost, and to my great satisfaction he was relieved by the operation, and said the removal of the limb was "as good as a dose of laudanum." This was on the 1st of April. The stump healed by the first intention; and on the 16th of May I met him in the road driving a cow. I believe he is still alive and well, at 83 years of age.

II. May 13th, 1839. A very stout, plethoric drayman, had his right hand severely lacerated by the bite of a stallion which he was leading. I amputated below the elbow at midnight, before inflammation supervened, and the man recovered without a single untoward symptom.

III. May 14th, 1845. I amputated the arm of a lad, 13 years old, on account of a very severe gun-shot wound of the fore-arm. On the 12th of June the stump was quite healed, although his health had been disturbed by inflammation and suppuration of the right eye-ball from the presence of a shot.

IV. May 4th, 1846. I amputated the thigh of a young man of scrofulous diathesis, aged 26 years, for long-standing disease of the knee-joint. He had suffered a year or two before from a large abscess over the sternum, and had since lost one eye from purulent ophthalmia. He had no illness after the operation, took no medicine but an opiate and one dose of castor-oil, and by the 26th the stump was healed. The patient had, some little time before, been actually admitted into the Norwich hospital, but left again in the afternoon of the same day, owing to an impression that he could not recover away from home.

V. June 12th, 1846. I amputated a gamekeeper's leg below the knee, for extensive and long-standing disease of the ankle-joint. He was 38 years of age, much emaciated and hectic. A night or two after the operation, the perspiration, which had been profuse for many weeks, entirely ceased; and although the stump was obliged to be opened on account of hæmorrhage occurring some hours after amputation, it was healed, and the patient's health restored by the 24th of July.*

* In vol. XIII of *Braithwaite's Retrospect*, page 245, I find as follows:—"The most painful and tedious part of circular amputations is the dissecting back the skin to form a sufficient covering to the stump. Dr. Hanney recommends that an assistant should dissect back the skin on one side, whilst the operator does that of the other, and thereby shorten materially that most painful and unseemly part of the operation." This appears to me an extraordinary proceeding to advocate, and I imagine the assistance here recommended must prolong, rather than shorten, the time of the operation. In none of the five cases above reported did I dissect back the skin; yet I found that by employing an assistant to draw up the integuments before and during the first incision, and doing the same myself with my left hand, I obviated the necessity for making any dissection of the integuments, except dividing a few bands of cellular membrane, in order to secure a sufficient supply of covering for the stump, even in the thigh, when the retracted parts were again drawn forward after the removal of the limb.