method of vaccination as a preventive, than in the administration of drugs as antidotes. That we must not, however, despair of the latter possibility is shown by the effects of quinine in ague, and of salicylic acid in rheumatism. But even in our present comparatively helpless condition in the face of most of the acute diseases, the plan of simply dieting the patients, and placing them in favourable hygienic conditions, and only interfering with reluctance to relieve some distressing symptoms, or to counteract some disastrous complication, is far more effectual for good than the heroic bleedings and antiphlogistic treatment of former days.

For the second class of affections—those, namely, which consist of definite structural changes in organs,—we cannot expect to find specific remedies. It was only the ignorance that such morbid changes existed, and were the origin of the symptoms which presented themselves, that led men to harbour such groundless hopes. But are we in a worse condition now than we were then? Quite the contrary. Our present knowledge of physiology teaches us that health consists in a certain equilibrium, more or less stable in different individuals, which depends upon the regular, unobtrusive, and coördinated working of all our organs. The activity of the latter varies constantly within certain limits. The heart, for instance, beats more rapidly and energetically, and respirations are more frequent, during physical exertion than during repose. The kidneys act more vigorously in a cold during repose. The kidneys act more vigorously in a cold atmosphere; the skin in a warm. If one of these organs is diseased, the guide to treatment is mainly a consideration of the physiological or healthy state, and our object in chronic affections should be to re-establish an equilibrium, as far as is possible, even though it be necessarily less stable than the normal one. Take, for example, a case of dropsy dependent upon an incompetence of the mitral valve. Here the slowing and obstruction in the circulation, and the consequent exulation of serum, are due to the heart's the consequent exudation of serum, are due to the heart's failure from the extra work thrown upon it and the wrong direction which is given to the blood. Now we know that in health the heart's work is diminished by a good many beats in the minute, and the circulation made easier, by assuming the recumbent position; we know too that digitalis is a drug which increases the force and regularity of the cardiac beat, and diminishes the number of pulsations, and consequently acts beneficially where the heart is beating rapidly, feebly, and irregularly. The patient is therefore ordered to bed and given digitalis. He loses his dropsy and appears to be cured. The physician, however, knows well that the disease remains as before, and that the extra work thrown upon the heart by the same amount of exercise which would be harmless to a healthy man, would again bring on dropsy in his patient. But the latter may often lead for a long time a comfortable existence, if he recognises the fact that his condition of health is less stable than it used to be, and if he acts upon the advice of his medical attendant. And so it is with a great many chronic diseases. We have no specifics which will cure them, but we have a knowledge of physiology and pathology which is far better than drugs, and which may enable our patients to live more at ease, though on a lower level of health, so to say, than they could possibly do if we substituted drugs for physio-logical rules of life. The two should be combined, but less prominence must be given than of old to the contents of the Pharmacopæia. We have then, it seems to me, made great strides in the treatment of chronic diseases in modern times strides in the treatment of chronic diseases in modern times, though our methods do not always appeal to the feelings of the public in the same way as if we dosed them medicines.

In the third category of diseases referred to above—viz., those which are accompanied by no tangible structural alterations—physiological rules of life, especially as regards dietetics and hygiene, are still more efficacious than in the class of maladies we have just been considering; and we can often do much by drugs and other means as well.

(To be concluded.)

On the 28th ult. the Rodgett Infirmary, in connexion with the Royal Albert Asylum at Lancaster, was opened by Lord Lathom, and was accepted by the Earl of Bective on behalf of the central committee. The building, which has been erected in the grounds of the institution, at a cost of £4000, is the gift of Mr. Edward Rodgett, of Darwen's Bank, Preston. Mrs. Rodgett furnished one half of the building.

## THE CUTANEOUS DISEASES OF CHILDREN.<sup>1</sup> By DR. ROBERT J. LEE, F.R.C.P.

In looking over the records of cases of cutaneous disease in children which have come under my observation during the past ten years, it seemed possible to analyse and condense them into such a form as to make the results of interest and value to the members of this Society. The total number I have seen of such cases in the course of each year has been on the average two hundred, sometimes more and sometimes less. I doubt so much whether we should gain any very practical knowledge from a statistical analysis of them that I have determined to present only very general conclusions of this kind to consideration, and to reserve a full statement for another occasion. For a somewhat similar reason it appeared to me well not to dwell on those rarer forms of disease which from time to time have come under notice, for I have seldom found that what are termed 'unique cases" in this class of disease leave much matter for thought or prompt to new inquiry. They stand alone like curious specimens in a museum, peculiar and attractive on account of their rarity. Perhaps one of the most interesting subjects which can engage attention in the study of the diseases of children in all their forms is the extent to which age and age alone appears to exert an influence in determining the characters of morbid action, that is to say, in producing a distinct difference between typical characters

as they appear in early and adult life.

The questions, then, which we may endeavour to answer are these: In what respects do the usual forms of cutaneous disease present peculiar characters in infants and children? The second question: In what ratio do certain forms occur more or less frequently in children than in adults? The third: What explanation can reasonably be offered for these differences? And fourthly: In what way must our treatment be altered to suit them? Now, there are certain forms of cutaneous disease peculiar to children. There is one form extremely common, but it is not a very definite one. It is that which we see so frequently affecting the head, forehead, and face of infants, the back of the ears, and generally the tissues of the head, face, and neck. We must not attempt to name it by any of the ordinary names, for this reason, that its characters are too general to answer to the accurate definitions of dermatology. It shows a feeble apprehension of the true spirit in which we should regard the subject of skin diseases to try to find a name for every case we see. It is difficult, I know, to liberate our minds from the force of habit, at the same time we must not fancy that to find a name and a place for a disease is really of much importance towards the scientific knowledge of its nature and treatment. We may take a single term to include all the varieties of this common disorder of the skin—the term dermatitis; that is a term analogous to those we use in the case of inflammation of other organs and parts of the body, as, for example, bronchitis, peritonitis, &c. Dermatitis of the head, the face, and the body is the commonest cutaneous disease of face, and the body is the commonest cutaneous disease of children. In the year 1879, in a total of all forms of skin disease in my hospital practice, of 197 there were 129 cases of dermatitis of the kind referred to. Last year, in a total of 200 cases, there were also 129 cases of dermatitis, or rather more than 63 per cent.; and so in other years I find much the same ratio obtaining. Dermatitis of the scalp in the child includes eczema and impetigo in all their forms and combinations. We may define any particular case if we please by some pathological addition—such as serous or purulent, scaly or epithelial, tubercular, and so on. No one can object to this, because it is an accurate mode of description. It is clear that the cutaneous diseases of children do not resemble those of adults in regard to the 63 per cent. of cases of ordinary dermatitis. If, however, 63 per cent. of cases of ordinary dermatitis. If, however, we analyse the 37 per cent. remaining, we find that these include forms more or less common to all periods of life.

It may be urged that this dermatitis occurs in grown-up persons; at least that we cannot tell the difference between it in children and adults. This is not the case, whatever may be said to the contrary. Adults are not liable to the same tendency to inflammation of the scalp and neighbouring parts as young children. In the ordinary practice of a

<sup>1</sup> Read at the Medical Society of London, Nov. 17th, 1881.

hospital for children, more than 10 per cent. of the total number of cases are suffering from some form of cutaneous This alone shows how commonly the skin is affected in early life. It is clear, then, that one of the first points to which attention would naturally be directed is the causes of dermatitis-its nature, course, and treatment. The 37 per cent. of other cases would be found to contain examples of tinea tonsurans, herpes in different parts of the body, congenital diseases of the skin-which, by-the-by, have a singular relation to the condition of maternal health during pregnancy,—a large number of cases of syphilis, a few of scabies, of scrofulous or tubercular disease, and some very rare forms which I shall purposely exclude. Lately the relation of dermatitis to vaccination has been receiving some attention.

A few years ago I ventured to suggest what appeared to be the probable connexion between vaccination and the skin disease which so often follows it. Dermatitis of the head or face may follow any local sore, whether on the head, face, or any other part. I mean to say we may take it as a fact that if the skin of a young child is inflamed at any point as, for example, by the application of caustic in the treatment of nævus, by an injury or fall, but most commonly by vaccination—if the skin at that point and around becomes inflamed, from want of care, cleanliness, or other cause, then some other part, generally the head and face, may become affected. The same thing happens often after chicken-pox, herpes, measles, and some other maladies.

Now, I could well occupy an hour in discussing the question what is the connexion between the first local sore and the secondary disorder. It would not be right to infer that every case of dermatitis must have arisen from a local cause, at least there is no evidence that such is the case, but it is quite true that when a woman asserts that the skin complaint followed vaccination we are wrong if we deny the connexion. The question of difficulty to decide is this, Does the dermatitis of the scalp or face arise from a nervous irritation of the skin, or is it due to the absorption of some morbid material developed in the primary seat of inflammation, and arrested in the tissues of the skin, which are affected much in the same way that joints are affected in gout or pyamia? I am quite certain that the dermatitis is not due in these cases to an external cause—that is to say, not to infection by contact, not to the transference of matter from the local sore to the head or face. Lately Mr. Hutchinson has given some attention to this subject, but I do not feel satisfied with the explanation he offers. He is speaking of dermatitis when it follows varicella, variola, or any exanthem as measles, "which, he says," "possesses the power in exceptional cases of making the skin irritable, and thus laying the foundation for long-continued and most trouble-some conditions of prurigo." You perceive that we want either a physiological or a pathological explanation, which is not provided by saying that the skin is made irritable unless the reason for such irritation be given. I am inclined, after most careful consideration, to the view that dermatitis, when secondary, is due to absorption of some product of inflammation as yet unknown. I would even go further than this, and express the belief that all cases of dermatitis are due to a similar cause—that is to say, that strophulus, ecthyma, eczema, and impetigo, all occurring in the same child, as they do, in different parts of the body, are due to the presence of particles in the blood which excite cutaneous inflammation. I advance this view very much for the sake of discussion, though I may say it is the result of the observation of many hundred cases and careful thought. It has certainly had the effect of making the study of cutaneous diseases more interesting than otherwise they would be; and not only this, but it has led to very satisfactory results in the best test of its value—that is, in the practical treatment of this important class of disease in children.

Let me say here that the subject of cutaneous diseases had a great interest for me when in Paris, fifteen years ago, from the fact that it was the opinion of Professor Hardy, the distinguished dermatologist and physician, that English physicians were in darkness as to skin diseases. I certainly formed the impression, when acquainted with Professor Hardy's views, and the scientific method which he pursued He makes, in his observations, that he was not far wrong. however, the statement in his published lecture that eczema, psoriasis and others of the same class, are diathetic, much as gout, rheumatism, and some other diseases are hereditary, or at least to some extent dependent on hereditary influences. So far as children are concerned this statement is not correct, though it is a curious fact that a certain number of children, not many, have dermatitis in a somewhat different form when there is hereditary tendency—that is to say, in about 2 per cent. of cases of dermatitis of the head and face, the disease is more obstinate, more irritable, and more severe; and then we find there is a history of family tendency to cutaneous disease. It is not necessary to point out the practical use of this knowledge in the treatment of such cases beyond saying that to these the ordinary rules of treatment of eczema and others of the class may be applied, whereas in ordinary dermatitis no such treatment is required. Dermatitis in its common form in children is not the eczema of dermatologists, nor impetigo, nor any offspring of theirs, but a simple inflammation of the skin of a more or less transitory nature, variety of degree, and frequently of uncertain origin.

It will be asked, Are we to regard strophulus, ecthyma, eczema, and impetigo, the four common names given to dermatitis in its various forms, as due generally to a local cause where a morbid product has been absorbed—that is to say, for example, whether in the process of dentition, in derangement of the digestive organs, as well as in some spot in the skin itself, are we to look for the local origin of the dermatitis which so frequently affects children? I would ask that this view may be considered impartially, and tested by past and future experience. It may be proper to be prepared with some reason for the fact that adults do not suffer in the same way as children in respect to the frequency with which the skin is affected. This is a difficult question, and may be submitted to dermatologists for an explanation. It is sufficient for me to observe simply the frequent connexion between dermatitis and some previous disturbance of the system of a young child, and so to look beyond the local treatment of the skin, although that is of the utmost importance, and endeavour to ascertain the primary cause of the dermatitis. This view indicates a very different system of treatment of dermatitis in young children from

that which is required for the eczema of adults.

Let me now make a few remarks on the 37 per cent. of cases I have mentioned. We might take every form of cutaneous disease, and we should find that in the child or infant it is somewhat different from what we see in adults. For example, this is observed of herpes zoster, which occurs in from  $3 to 3\frac{1}{2}$  per cent. of all cases of cutaneous disease in children. Herpes does not so frequently affect the abdominodorsal region in children as in adults. We meet with it in relation with most of the important nerves of the face, head, trunk, and the humeral and femoral regions. Herpes is not so serious an affection in children, and often produces little, if any, constitutional disturbance, or apparently much local pain. It has occurred to me to think that sometimes herpes is suppressed, and certainly I have seen instances where the vesicles were apparently arrested, and only faint indications seen of a change in the skin where the pain was located. Probably the same thing has been observed in adults, though I do not recall any special notice of it. During the five vears from 1875 to 1880 inclusive thirty-three cases of herpes passed under my observation in hospital practice, of which only six were cases of herpes zoster—that is to say, were abdomino-dorsal in the seat of eruption. In the other cases, the face, forehead, arm, coccyx, or thigh was the part affected. We hardly find an explanation of this liability to herpes occurring in various parts in the supposition that the nervous system of young children is more sensitive than that of adults; and as I see no satisfactory reason for this difference, it will be better not to hazard any theories upon it.

The syphilitic cutaneous cases occur in the ratio of about 5 per cent. of all cutaneous cases, and the chief point of interest seems to me to be the relation which exists between the particular form of eruption and the history of the case. By proper management, I was enabled to obtain from both parents in many cases a succinct account of their history previous and subsequent to marriage, and thus to determine how far the condition of the child depended upon that of the parents. For instance, the form of eruption on the child, when marriage had occurred within twelve months of infection in the father, was very different from that where two or more years had elapsed between infection and marriage. fection and marriage. I am speaking now, of course, of the Within certain limits it seems possible to prefirst child. dict from the state of the child what was the history of the parents. That, at least, is the impression produced on my mind by the careful study of this subject, and after having

obtained the history of more than twenty families, the number of whose children born dead and alive was above Very many interesting and important details I am obliged to refrain from mentioning on this occasion, in regard to the subject of family syphilis, as they do not bear directly on the subject of the cutaneous diseases of children. At one time this subject seemed a hopless one, for syphilis is not like variola, scarlatina, and that class of maladies, so that analogy rather misleads than assists. To take an example: The second child is brought for treatment; its age is between two months and six months. The first child, we are told, died soon after birth, and had symptoms of well-marked syphilis. In the second child we notice that the surface and deeper tissues of the skin are affected, the nasal and oral orifices are cracked, the skin of the nates is sore or ulcerated. and we are inclined to dismiss the case without a question. Compare this with a case of condyloma in a child over twelve months old; or one of softened gummata which have become furuncles, bluish, painless, soft boils, generally on the thighs or buttocks, and full of thick creamy pus. The family history of these two cases will be quite different. In the first the infection of the father is almost certain to be recent, and the mother will have suffered. In the latter, years will probably have elapsed since the father's infection, and the mother will be free from any trace of disease. These are typical cases. Between these cases, however, such varieties are met with as to make artificial classification of but little assistance in the study of this class of disease. The treatment of syphilitic dermatitis, as I have been accustomed to call the common form of infantile syphilis first described, as well as of the softened gummata and furuncles, is so simple and well known that it requires no remark.

Of the cases which remain there were about 6 per cent. of tinea tonsurans; sixty-four of these, which occurred during the years 1875 to 1880, were treated on the principles advanced in a short communication to the British Medical Journal (1877, p. 74). The principle rested on the ordinary laws which preside over the development of spores like the trichophyton, which may be destroyed by many agents when fully developed, but in the early stage resist their action. Further, that the value of the agents employed depends on their specific action as germicides, and not on their irritant properties, which inflame the cutaneous tissues. So that the method and frequency of application are the chief points to attend to, particularly in hospital practice, where cases are seen only once a week. The cases now remaining of any interest are too few to be considered in classes, and on account of their special peculiarity of character need not be referred to at the present time.

## SEVERE INJURY TO PELVIS AND RIGHT KIDNEY, AND SUPRA-RENAL CAPSULE.

BY HARRY LUPTON, L.R.C.P. LOND., &c., SURGEON TO THE STRATFORD-ON-AVON INFIRMARY.

THOMAS W----, aged sixty-nine, was admitted into the Stratford-on-Avon Infirmary on the 4th of August last, about 6 P.M. He stated that when in charge of a timber waggon, loaded to some three tons, he was overtaken by the front wheel which caught his boot, threw him down on his back, and passing between his legs went over his pelvis, and passed over his body above the left ilium. The accident had occurred some three hours prior to admission, about five

On admission he was suffering severely from shock; pulse was small and weak, extremities cold, and he was bathed in a cold sweat. Chief pain referred to ramus of left pubic bone. He was put to bed, hot bottles applied to the feet, and hot blankets to the abdomen. A little brandy and milk was given him, which was shortly rejected, together with some fragments of bacon and blood-stained fluid. The sickness persisted till about 5 A.M. on the 5th. The vomit consisted of dark bloody fluid, in quantities of a table-spoonful or so each time. The patient stated that he had passed urine about an hour before the accident. He had had no desire to pass urine since. An attempt to pass a catheter failed, the instrument being palpably deflected to the left on reaching the membranous portion. No history of prior

stricture or urinary trouble. Ordered small pieces of ice to At 8.30 P.M. my colleague, Mr. Nason (senior surgeon to the infirmary), kindly saw him in consultation with me. There had been no effort or desire to pass urine. An endeavour to pass a catheter was made both by Mr. Nason and myself, with a similar result to the former attempt. The instrument passed no farther than the membranous portion, when it was palpably deflected to the To continue treatment with small quantities of braudy and milk and beef-tea. The patient had rallied considerably since admission.

On the 5th he was seen again at 10 A.M. by Dr. Kingsley (physician to the infirmary), Mr. Nason, and myself. Condition much the same; no attempt or desire to pass urine; no evidence of distended bladder or of extravasation of urine; but considerable distension of scrotum from effused blood, evidently the result of the bruising. At 3 P.M. seen again by Dr. Kingsley and myself. Some increase of scrotal effusion; no evidence of distended bladder. With the concurrence of Dr. Kingsley I aspirated above the arch of the pubic area of dulness limited to some two inches above this bone; no result. At 8.30 P.M. again visited by Dr. Kingsley, Mr. Nason, and myself. Symptoms, area of dulness, &c., unchanged. Scrotal swelling increased; but evidently no urinary infiltration. Total absence of red, brawny, inflammatory swelling, &c. Query—Had he total suppression of urine? But the characteristic symptoms of this grave continue? dition were wanting. No odour of breath; no coma, &c.

No alteration of symptoms took place till August 6th, at 8.30 P.M., when the scrotal swelling having much increased, it was punctured in a number of places with a flat double-A considerable amount of blood-stained edged needle. serum drained from these punctures, but which was markedly free from the slightest urinary odour; though there was no increase of supra-pubic dulness. It was considered advisable to again aspirate down the pubes, as it was now some eight-and-forty hours since any urine had been voided, and all attempts to pass any instrument into the bladder failed as formerly. A small quantity of blood-stained serum sobtained as the needle passed into the subcutaneous cellular tissue, and again from the abdominal cavity, but this fluid was also markedly free from any odour of urine. General condition worse; pulse small, rapid, and weak; skin cold; temperature slightly below normal; perfectly conscious; no urinary odour of breath; no coma; no abdominal tenderness or evidence of peritonitis manifested all through, but hiccough at intervals since 6.30 P.M.

On Aug. 7th, about 3.30 A.M., sickness recommenced, and at 5 A.M. he died.

I had omitted to state that fæces passed involuntarily and without the patient's knowledge on the 4th, 5th, and 6th. Examination per rectum merely revealed the fact that there was no distended bladder beyond the prostate. It was thought by Mr. Nason and myself that the pubic arch was incomplete, but on this point we were not certain.

An examination of the body was made on Aug. 9th at

11 A.M., fifty-four hours after death, in which I was kindly assisted by Dr. Kingsley and my partner Mr. Gairdner, Mr. Nason being unavoidably absent. On opening the abdomen it was seen that there was absolutely no trace of peritonitis. The peritoneum was healthy, saving a little staining and bruising of some coils of small intestine in the left iliac region. Below the vesical fold of peritoneum was a collection of serous fluid, perhaps six ounces, distinctly not urine, and free from the slightest urinary odour. pubic bones were separated (not fractured) at the symphysis, and gaped something like two and half inches apart. The only portion of the wall of the bladder remaining was a portion of the posterior wall, before and above the prostate, about two inches and a half square. The whole of fundus and anterior wall of the bladder had simply "gone." It was destroyed, disintegrated. The very prostate itself had evidently undergone crushing, yet the peritoneal fold was uninjured and healthy. A sound introduced per urethram passed, somewhat to my discomfiture, with ease into the space where was once the bladder, and there was no rupture of the urethra. The left kidney was uninjured and normal, but the right kidney was deeply bruised at its upper end, and its supra-renal body crushed and to be a super the restriction of the control of Evidently the man must have been mistaken as to the direction taken by the wheel.