treated I feel convinced that the plant has a specific action on the poison of dysentery apart from any mere astringent properties. Whatever the active principle of the drug may be it appears to have a soothing influence on other forms of intra-abdominal irritation to the lower nerve centres. This was shown by the distinct and rapid relief it gave in about six cases in which I tried it in pelvic pain due to old inflammatory peri-uterine lesions. In each of these cases the relief was much greater than that obtained by opium or its alkaloids. These facts lead me to conclude that the effect of the drug on dysenteric symptoms is partly due to its soothing action on some of the lower nerve centres and partly to the peculiar healing influence which it exerts on ulcers of the intestinal tract. In the beginning of 1896 through not being able to obtain specimens of the plant I was obliged to return to the use of pharmacopœial drugs. This was unfortunate, as during the Matabele rising from March to July, 1896, an epidemic of dysentery occurred at Bulawayo, which would have afforded me very valuable materials for further researches with regard to the action and the peculiar properties of the drug. Though so far non-plussed I was still able to cope successfully with acute cases of dysentery, and it may be of general interest to give some account of the treatment pursued. One of the first cases which came under treatment was that of a child, four years of age, suffering from acute dysentery. I ordered four grains of pulvis ipecacuanhæ compositus with four grains of pulvis kino compositus every six hours and an enema of warm water twice a day. The child appeared to be all right the next day, but two days after the mother sent for me again, when the dysentery was as bad as ever and prolapse of the rectum was commencing. The powders seemed to have no effect. I ordered the enema to be continued and three grains of phenacetin to be added to the powders. The result was excellent, the child rapidly recovered and no relapse occurred. Most of the subsequent cases occurring in this outbreak were of a very acute form, often associated with a good deal of vomiting and sometimes high temperature. The treatment, briefly stated, was as follows. A mixture containing one and a half drachms of liquor bismuthi, one minim of acidum hydrocyanicum dilutum, ten minims of liquor morphinæ hydrochloratis and water to one ounce was given every four hours in cases where there was much vomiting. Ten minutes after each dose of the mixture a powder containing ten grains of pulvis ipecacuanhæ compositus, ten grains of pulvis kino compositus, and five grains of phenacetin was administered. In other cases ten grains of bismuthi sub-nitras was given before or with the powders. Where much fever was present a powder containing eight grains of quinine with eight grains of phenacetin was given night and morning. In cases in which the attack was of more than forty-eight hours' standing an enema of about two quarts of warm water with a little Condyl's fluid was given. The patients were not kept in bed except in severe cases. Meat diet was strictly forbidden. Most authorities incline to the opinion that astringents and full doses of opium are not only useless but do much harm in the acute phase of the disease, and I think the foregoing powder would certainly come under that condemnation. The results, however, were extremely satisfactory in all the acute cases, which numbered somewhere about forty. I attribute their success to the addition of the phenacetin and also to the administration of the enemata. With regard to phenacetin, the *rationale* of its action in dysentery is somewhat similar to that of ipecacuanha. Dr. Ewart attempted to explain the action of the latter in the following terms:—"In large doses it stops inflammatory action, augments the alvine secretions from œsophagus to rectum, increases the flow of bile and pancreatic juice, purges without irritating, lessens peristaltic action, produces rest, restrains tormina and tenesmus, promotes diaphoresis, restores the balance of the portal circulation, is a direct sedative to cardiac action, and acts on the stomach and duodenum, pancreas, liver, and small intestines, and on the glands of the large intestine."

Although this statement is somewhat vague it is in the main, perhaps, as correct a representation of the action of ipecacuanha, and still more so of such powerful diaphoretics as phenacetin, as in the present state of our knowledge can be given. Consequently it acts as a corrective to the astringent qualities of kino and to the tendency which opium has to check the natural secretions in the intestines, which latter it is most important to encourage. Both the astringent action of the kino and the sedative action of the

opium are very necessary in relieving the dysenteric symptoms, provided any deleterious action is guarded against. In order to explain the beneficial effects of large enemata in the treatment of dysentery it will be essential to draw attention to a very important point in the pathology of the disease and one which appears to have been almost entirely overlooked. After the first day or two in an acute attack of dysentery, and commonly in chronic cases, the small intestines are loaded with fæces. The way in which this condition is brought about appears to be as follows. An acute attack commences with diarrhœa which is at first feculent in quality; the stools gradually change from feculence to mucus and blood. This change takes place any time within the first forty-eight hours. From this stage onward, perhaps for days, no fæcal matter is passed. What apparently happens is that the dysenteric ulcers in the large intestine cause spasmodic contraction about the ileo-cæcal valve, which entirely shuts off the small intestine from communication with the large, thus preventing any chance of irritation to the dysenteric ulcers from fæcal matter. An exactly similar condition is seen in inflammation of the cornea, where the eyelids are spasmodically contracted as a natural protection against the irritation of light. This condition having been once induced it is self-evident that to give heavy doses of opium and astringents, without at the same time endeavouring to clear the small intestines of fæcal matter, would only tend to aggravate the disease. The fæcal matter continues to accumulate in the small intestine, increases the tendency to tormina and tenesmus, and adds fæcal poisoning to the other symptoms. This latter accounts, I think, to a large extent for the very rapid exhaustion which occurs in cases which are left untreated. It is for these reasons that large doses of opium and astringents have been so universally condemned; but I contend that if given with proper precautions opium and astringents are of decided benefit in the acute stages. I now make it a rule to inquire on first seeing a patient whether any fæces have been passed during the last twenty-four hours, and unless the attack is quite recent I invariably find that such has not been the case. I then order an enema of two or three pints of warm water with a little Condyl's fluid in it. The patient as a rule passes a large quantity of fæcal matter and experiences a great feeling of relief, the tenesmus disappearing for the time being. Very weak solutions of any disinfectant are applicable, with the one exception of bichloride of mercury; this drug in the weakest solutions causes acute pain. In some cases, where the ulcer is low down in the rectum, the sphincter ani will be found to be paralysed temporarily. It is then impossible to evacuate the small intestine by means of enemata. In these cases it is necessary to give castor oil. In the subsequent treatment of dysentery, provided the tendency of the small intestine to become blocked is counteracted, no harm can result from the use of opium and astringents, combined with such diaphoretics as ipecacuanha and phenacetin; and judging from my experience in a large number of cases I feel convinced that they materially assist in the cure of the disease.

Birmingham.

ACUTE PEMPHIGUS.

BY MAURICE EDEN PAUL, M.D. BRUX., M.R.C.S. ENG.,
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IN THE LANCET of Oct. 31st, 1896, Dr. James Priestley described an interesting case of acute bullous eruption on an erythematous base, attended by severe febrile symptoms and ending fatally. He regarded the case as almost, if not quite, unique, but asked for opinions from those who have had experience of like cases. In the latter half of 1890, when I was in residence at the London Hospital as house physician to the late Dr. H. G. Sutton, I saw a very similar case. Notes are not now accessible to me and I can describe the case from memory only, but fuller particulars could readily be obtained from the records of the hospital. The patient was a middle-aged woman of a full habit of body. She was suddenly attacked with febrile symptoms attendant on the outbreak of a violent dermatitis. The skin over large areas of the trunk and extremities was bright red and raised, presenting, like erysipelas, a firm edge at the

junction of the inflamed and the healthy parts. On the surface of the inflamed areas of skin bullæ, from half an inch to one and a half inches in diameter, were freely sprinkled. In places these bullæ were confluent. It will be observed that this case differs from Dr. Priestley's in the presence of infiltration of the skin in addition to the erythema. That, however, the disease was not erysipelas was shown by the simultaneous appearance of the dermatitis in such wide areas. Moreover, diffused acute erysipelas would almost certainly have killed the patient in a day or two. I cannot recall whether there was or not faucial inflammation. Dr. Sutton was not attending the hospital when the patient was admitted, so at my request Dr. Stephen Mackenzie kindly saw the case. He said that it was anomalous, but that if he were compelled to give it a name he should call it "acute pemphigus." The patient was severely, even dangerously, ill for a time, but, as far as I can remember, made a good recovery in about ten days. The cause of the illness remained obscure.

Surely cases of this kind, though rare, are well recognised. Whitehouse, in the article on Bullous Affections in "Twentieth Century Practice," describes it as "pemphigus acutus," an eruption of bullæ on an erythematous base, with febrile symptoms and pharyngitis. He says, however, that the bullæ never exceed half an inch in size. In Dr. Priestley's case "the smallest bullæ were as large as a hen's egg"; and in the case I have described the bullæ were also, unless my memory plays me false, far larger than those mentioned by Whitehouse. But when the line that separates a "vesicle" from a "bulla" has once been passed, variation in size depends probably on individual peculiarities of skin and on the intensity of the inflammatory process, and cannot be regarded as specific. Again, the only difference between pemphigus acutus neonatorum and the pemphigus acutus of older children and of adults, appears to lie in the absence in the former case of pharyngitis. There is the same acute outbreak of large bullæ on an erythematous base, with fever and prostration. The absence of pharyngitis in pemphigus acutus neonatorum may be due to the fact that infants appear to be exempt from catarrhal inflammation of the pharyngo-tonsillar region. Even in the case of the powerful poisons of syphilis and diphtheria, the stress of the inflammation falls in infants on the nasal and laryngeal mucous membranes, while the fauces are slightly if at all affected. Catarrhal pharyngitis I have never seen in a child under two years of age. The cause of these acute bullous eruptions remains undiscovered, and I have no light to shed on the subject. My excuse for writing this paper consists in my desire to bring before the profession the case already described and also one much more singular that came under my notice three years ago.

Case of acute pemphigus and acute eczema of the face in an infant, the two diseases being intercurrent, but independent in course.—The patient was a female child aged two months. Acute eczema of the face and hairy scalp of ordinary type began on Jan. 28th, 1894. On Feb. 4th bullæ appeared in the groins, then on the neck, and then on the upper part of chest and back, the crop in these regions occupying three days in its development. The blebs were about half an inch in diameter and in many places confluent. Three fingers of the right hand were entirely denuded of epidermis on the morning of the 7th. Up to this time the general condition had been good, but further blebs appeared, so that on the 9th the eruption was almost universal except on the legs, head, and face; collapse set in, and the infant was kept alive only by the free exhibition of brandy. The blebs being closely set and rupturing early, the appearance was that of an acutely inflamed skin with the epidermis hanging in shreds and patches, as in an extensive burn of the second degree. On the evening of the 9th the child began to recover strength, but moderate fever continued till the 12th. By the 14th the skin was soundly healed. Meantime, on the face, on which no bullæ had appeared, the eczema had run its ordinary course. By the 14th the period of active secretion and crust formation was over; but sub-acute discrete papules and vesicles continued to appear for more than a month longer, the child's general health remaining good all the time. The child is now, at three years of age, in excellent health. Such an example of two specifically distinct skin diseases running an independent, but a simultaneous, course in the same patient is, I think, sufficiently rare to deserve being placed on record. The sanitary surroundings and the feeding (artificial) of the

child at the time of the illness were all that could be desired, and no cause could be discovered. The case was an isolated one in my practice. The child's father had suffered from acute eczema in infancy; again and severely at the age of eighteen years; and is now never free from chronic eczema in winter. This fact may interest those who believe in the existence of a "dartrous diathesis."

Nagasaki, Japan.

TREATMENT OF MALIGNANT TUMOURS BY MIXED TOXINS.

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IN an annotation in THE LANCET of Dec. 5th, 1896, there is a record of a meeting of the Johns Hopkins Medical Society, at which Dr. Coley read the results of his treatment of 160 cases of malignant tumour by subcutaneous injections of the toxins of erysipelas and bacillus prodigiosus. Dr. Coley's perseverance and patient research should merit respectful attention, even though his resulting success be so limited. I should like to draw attention to an extract from my case-book on "Coley's fluid."

A stout Jewess, married, aged fifty-three years, with a strong carcinomatous family history, consulted me in 1893. At the axillary border of the right mamma, distinct from the gland tissue, I found a hard, clearly defined, freely moveable mass the size of a walnut, over which the skin was unbroken. I offered to excise the growth, but consent was refused. In October, 1895, I was again consulted and noted that the tumour was distinctly nodular, the size of a hen's egg, attached to the skin, and moveable with difficulty. The right mamma was much swollen. The cutaneous coverings of the axillary half of the mamma were hard and œdematous. The skin over the tumour was unbroken. The axillary and clavicular gland were implicated. On Oct. 3rd Mr. F. S. Eve kindly saw the case with me. We decided not to operate for many reasons, among which were: the duration of the disease from my first diagnosis in 1893; the presence of an adherent, ill-defined, infiltrating mass in the axilla extending under the pectoral muscles; the condition of the skin; and the strong objection of the patient's friends to any operation. The patient herself also had a horror of any attempt at surgical interference, yet craved that something might be done. As a last resource, and to satisfy the patient, subcutaneous injections of Coley's fluid were commenced. On Nov. 22nd a hypodermic injection of one minim of Coley's fluid was administered about one inch from the tumour on the sternal side. There was no appreciable reaction beyond a slight blush round the tumour. On the 25th two minims of a weaker solution (equal to one minim of the previous stronger solution) were injected with no appreciable result. On the 27th two minims were injected and resulted in rigors, followed by about one inch of slight circumferential blushing lasting twenty-four hours. The patient was mentally but not physically upset. The temperature was 101° F. and the pulse was 90. The œdema of the skin was certainly less. On Dec. 3rd three minims were administered and followed by slight rigors. On the 6th five minims were given, which produced strong rigors, vomiting, and diarrhoea (lasting two hours) within half-an-hour of the injection, which was well into the base of the tumour and not into the neighbouring skin. Four hours after the injection the temperature was 102.5° and the pulse was 140; there was no body rash, but a broad circumferential blush and axillary gland tenderness. There was great bodily and mental distress. Following this there were debility, loss of appetite, a daily temperature of from 100° to 101°, with a pulse of from 90 to 100, until the 14th, when another injection of four minims into the base of the tumour was given, from which there was no reaction. By this time there was not much increase in the size of the base, but the fungations were more expansive. The tumour was freely moveable. The œdema of the mamma and of the axillary folds was less. There was no inflammation or suppuration at the seat of the injections. There was no body rash and no wasting, but there were slight occasional hæmorrhages and free serous discharge from the fungating surface. On the 20th the fungating mass was sloughing