most hopeless cases need not be despaired of, though, of course, there must be exceptions, as, for instance, when the patient is felled from the very commencement by the strength of the poison.

I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar life) for the last four months, and I am bound to say that, of all remedial measures in this disease, it is, in my opinion, the most reliable. My treatment is as follows. The moment the throat begins to become affected, I administer to a child, say of about six years of age, ten minims of the sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied, every three hours, to the fauces for a few minutes at a time, by using the pure acid, in severe cases, or equal parts of the acid and water, according to the severity of the case. Sulphur should also be burned in the sick chamber half a dozen times a day, by placing flour of sulphur upon a red hot cinder, and diffusing the sulphurous acid vapour through the room, until the atmosphere begins to become unpleasant to breathe.

In the worst cases, where medicine cannot be swallowed, this and the spray must be entirely relied upon; and the dark sordes which collect upon the teeth and lips should be frequently laved with a solution of the liquor potass. permang. *B. P.*, of the strength of about one drachm to six ounces of water, some of which should be swallowed if possible.

In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered, in rather large doses, in a separate mixture with chlorate of potash, and equal parts of the same with glycerine should be applied locally, with a camel's hair brush, several times in the day; but, as in the majority of cases among children, it is next to impossible to use a local application more than once; the spray and permanganate solution will then prove of great service.

As to other remedies recommended by various authors, ammonia is, nasty, and cannot be taken well by children; carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpine is a remedy that may give good results hereafter, but I have had no experience of its use.

I have purposely omitted any mention of diet in the above remarks, as seldom anything can be taken beyond a little milk, beef tea, and wine, until all danger has passed away.

REMARKS ON THE THERAPEUTIC USES OF OLEATES.

By JAMES SAWYER, M.D. Lond., M.R.C.P.,

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ABOUT 1811, Chevreal,* discovered oleic acid, and soon afterwards notices of the chemical and pharmaceutical qualities of medicinal oleates were published in France.† Professor's Attfield's is the first English paper on the subject, and it was published twenty years ago.‡ From this time, I know of no other publication on the use of oleates until the appearance of Mr. John Marshall's well known paper in 1872. Since that date, many papers have been published on the chemistry, pharmacy, and therapeutics of oleates, and various methods of preparation have found favour. In 1879, I recorded my experience of the use of oleate of zinc in the treatment of eczema, and in the same year I published some remarks on the employment of oleate of lead in the cure of that affection.§ I used an ointment of oleate of lead prepared according to the following formula: lead oleate, 24 parts; heavy and inodorous paraffin oil, 14 parts. The lead oleate was prepared by heating a mixture of oleic acid and oxide of lead. I found this ointment a very reliable local application in cases of subacute and chronic eczema, when conjoined with the employment of suitable general therapeutic and hygienic measures. A few months ago, Dr. Shoemaker of Philadelphia read an important paper before the Medical Society of Pennsylvania, on

the preparation and uses of oleates.* He claims to have introduced, for the first time, the use of chemically true oleates, in contradistinction to those previously prepared by the direct union of the acid with the base, with or without heat.

The new oleates are obtained by the double decomposition of sodium oleate with solutions of neutral salts, the sodium oleate being prepared by the saponification of oleic acid with a solution of sodium-hydrate. A solution of the sodium oleate in eight parts of water is precipitated by a neutral salt, and the precipitate, washed and dried, is the oleate required.

Messrs. Southall, the well known pharmacists, have prepared various oleates according to Dr. Shoemaker's directions, and some of these, namely, the oleates of lead, zinc and copper, I have examined and tested in practice. The new oleates present the great advantage, which practitioners will at once appreciate, that they can be used as dusting powders as well as in the form of ointments, so that they may be employed in those troublesome acute and discharging affections of the skin in which greasy preparations of any kind cannot be borne. Zinc oleate, which is a fine pearl-coloured powder, with a soft soapy feel, like powdered French chalk, or lead oleate, may be used alone as a dusting powder for the skin, or it may be so used diluted with powdered starch. One drachm and a half or two drachms of either of these oleates, mixed with an ounce of petroleum jelly or benzoated lard, makes a good ointment, which I have found efficient in cases of subacute and chronic eczema. Dr. Shoemaker has introduced oleate of copper as a remedy for ringworm. I have used it in the form of ointment, of the strength of one drachm and a half of the oleate to six drachms and a half of petroleum jelly, in some mild cases of ringworm, with excellent result.

OBSTETRIC MEMORANDA.

CASE OF INTERSTITIAL TUBO-GESTATION.

THE following case, that occurred recently in my practice, may be of some interest, as an instance of the danger attending such cases, and as an illustration of the fact that extra-uterine pregnancy may exist unsuspected, and interfering in no way with the patient's health, until the moment of rupture, when all the resources of our art are often powerless to save the patient's life.

Mrs. S., aged 35, sent for me hastily, at 8.30 P.M., on July 26th last. On my arrival, I found her in bed, lying on her right side, with the knees drawn up, complaining of intense pain in the left inguinal region. On examination, I found her fairly nourished, but very anæmic; the lips, gums, and conjunctivæ, being exceedingly pale. The surface of the trunk was warm; but the legs, arms, and face were cold. The face was clammy, and bore a very anxious expression. The radial pulse was almost imperceptible, and could not be counted. Respiration was 42 to the minute, and sighing. Nothing abnormal could be detected in the lungs. Temperature in the axilla was 95° Fahr. Her mind was clear, but she showed a great disinclination to enter into conversation. The pupils were dilated, and equal, the tongue pale and moist. The abdomen was distended, and tender on pressure all over, especially in the left inguinal region. There was dullness on percussion over the hypogastric and both inguinal regions, reaching upwards to midway between the pubes and umbilicus. There was intense thirst, and the patient complained of feeling very cold. She was too ill to admit of any prolonged examination, especially of the internal organs.

I was able to glean the following particulars from her husband. She came of a healthy family, and had been married seventeen years. She miscarried during the first year of her married life, and bore a fully developed child three years afterwards. Nine years ago she suffered from symptoms of inflammation of the womb; and four years afterwards had an attack of inflammation of the bowels; since which time she had enjoyed good health. Menstruation had been regular and normal, since the birth of her child (thirteen years ago), until eleven weeks ago, when she menstruated for the last time. The usual symptoms showing themselves shortly afterwards, she considered herself pregnant. The day before the commencement of the present illness, she had walked to Beachy Head and back, a distance of about seven miles, without feeling any inconvenience. On the morning of the 26th, she felt in perfect health, and took her breakfast, with a relish, at about 9 A.M., after which she went out for a walk. Whilst standing in a

* *Recherches sur les Corps Gras.*

† Squibb's *Ephemeris of Materia Medica.*

‡ "On a Method of Dissolving Alkaloids in Oils," *Pharmaceutical Journal*, 1862-63, vol. iv, p. 388.

§ "Oleate of Zinc in the Treatment of Eczema," *BRITISH MEDICAL JOURNAL*, April 19th, 1879; "Notes on the Treatment of Eczema," *the Practitioner*, November 1879; "Oleate of Lead in Eczema," *BRITISH MEDICAL JOURNAL*, May 29th and June 19th, 1880.

* *The Medical Bulletin*, July 1882. An excellent summary of Dr. Shoemaker's paper appears in the *Pharmaceutical Journal*, October 14th, 1882, under the following title: "The Oleates and Oleo-palmifates in Skin-diseases."