with as recurrences in cases requiring repeated operation, and as first manifestations in some of the more obscure varieties, and for lupus erythematosus, of which I have had a conspicuous example in hand for the last two years. In that period scraping has been done seventeen times, at intervals of from twelve days to three months, in a woman aged 35. The disease has lasted fourteen years, during the last ten of which I have frequently seen her. Some years ago her cheeks and nose were bright red, under a whole cuticle, and raised. She had been several times apparently nearly cured, after repeated cauterisation with a fine heated point, but never got quite well. A very steady improvement has taken place under the scraping, which has sometimes had to be applied to minute miliary nodules no bigger than a millet-seed. For hæmostatic purposes I use a wire ring, set at an obtuse angle, mounted in a handle, and pressed firmly round the spot operated on; and, as soon as the scraping is done, solid nitrate of silver, rubbed into the raw surface. This effectually arrests or prevents bleeding, and secures for a few days an aseptic scab. In more extensive cases, requiring the sharp spoon, nitrate of silver is similarly applied, followed by a dressing of boracic lint or sublimated gauze, wet under waterproof tissue.

A year or two ago I used liquor calcis bisulphitis, a lotion that has been much praised for lupus and for the sores left after excision of rodent ulcer. But I have not been able to find in it anything more than a convenient antiseptic, neither better nor worse than others in everyday use. I gave it a good trial also as a subcuticular injection into the lupus growth last referred to, before resorting to scraping, but it proved quite useless. What I claim for scraping is its thorough removal of morbid granulations, without waste by destruction of adjacent healthy structures, and the accuracy with which it can be done when the part is rendered bloodless by ring pressure.

SCARLET FEVER AND ITS TREATMENT.

By CLEMENT DUKES, M.D. LOND., M.R.C.P. LOND.,

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THE JOURNAL of June 11th, 1887, contained a valuable article by Drs. Jamieson and Edington on "A Method of Prophylaxis, and an Investigation into the Nature of the Contagium of Scarlet Fever." They have proved that the specific cause of scarlet fever is a bacillus, which they have cultivated, and with which they have inoculated animals and produced scarlet fever. They have also shown that this bacillus occurs in the blood during the first three days of the fever; that, later on, it is absent from the blood; and that it is found most extensively in the desquamating skin after the third week. They have, further, indicated a method by which this bacillus can be destroyed in the skin, and thus the spread of the infection of scarlet fever can be minimised, and the unprotected, even while residing in the same house, be safe from falling into its trammels.

But a still more important matter is the treatment and arrest of scarlet fever in each individual; for the first cry of a parent whose child has scarlet fever is, "What can you do to save my child; and how can you spare him from becoming maimed for life by its sequelæ?" his second question being, "How can you prevent its spreading to my other children?" This second question Drs. Jamieson and Edington have answered. It is with the hope that I may induce them to investigate the first question that I am writing this paper; for it has already been brought within a measurable distance of being answered by Dr. Illingworth, of Accrington, who, in a letter in the JOURNAL for May 1st, 1886, stated that the biniode of mercury (HgI_2) is a specific for scarlet fever. Recognising the importance of his letter in the use of mercury as a germicide, I resolved to administer the drug at the earliest opportunity. I have now given the HgI_2 in several cases of scarlet fever—with this result, that it not only arrests the fever, but it prevents the desquamation of the skin, or arrests it to such an extent that only a slight scurfiness of the skin of the hands and feet arises. If such be found to be invariably the case, will the bacilli of scarlet fever be found in the skin at all; and, if not, will not the infectious period of scarlet fever be thereby reduced to a few days only, and will not the sequelæ of scarlet fever be absolutely prevented?

The HgI_2 can be administered in the form of a pill or as a mixture of the liq. hyd. perchloridi c. pot. iodid. The only drawback to its use which I have at present found is that if it be given before the diagnosis is absolutely certain, the physician will be apt to think, when he finds no desquamation taking place at the usual time, that the case was not one of scarlet fever. The drug prevents the desquamation of the epithelium of the tongue, as well as of the skin, and the throat rapidly heals under its use.

I was busy collecting facts when Drs. Jamieson and Edington's valuable paper appeared, and I should have waited until I had collected a sufficient number of instances before writing this paper had it not been for the desire that others, especially the above-named authors, would assist in establishing, or refuting, this treatment, for the experience of one individual is limited.

The benefit to be obtained from the use of HgI_2 is far-reaching if it be reliable in all cases, for it not only prevents the desquamation of the skin, and thereby probably prevents the major part of the infectious nature of scarlet fever, but it will probably also be found that it obviates the necessity of keeping patients in bed for three weeks, which is the only safe rule hitherto, and isolated for five or six weeks, and will prevent the occurrence of the much-dreaded sequelæ.

The gist of the whole matter seems to be this: 1, that if the bacilli of scarlet fever are only discovered in the blood for about three days; 2, that if the bacilli, after this date, chiefly occupy the desquamating cuticle; 3, that if this desquamation can be prevented altogether by a medicine which destroys bacilli; 4, then, in all probability, the infection of scarlet fever will only last a few days, and we are within a measurable distance of limiting the spread of scarlet fever, and of removing its fangs by preventing the sequelæ.

NOTE

ON THE SO-CALLED "BACILLUS SCARLATINÆ" OF DRS. JAMIESON AND EDINGTON.

By WILLIAM R. SMITH, M.D., D.Sc., F.R.S.Ed.,

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IT having been my lot for several years past to be more or less interested in the subject of zymotic diseases, having had until recently the medical charge of the Delancey Fever Hospital, and latterly taking some interest in the inquiry which has been promoted by the Local Government Board into the study of the etiology of scarlet fever, I naturally read with attention the paper published in the JOURNAL of June 11th last by Drs. Jamieson and Edington. It at once occurred to me—putting aside other points in the paper to which exception might be taken—that the mode of growth of the so-called bacillus scarlatinæ was fundamentally opposed to the experience of our best observers in bacteriology on the life-history of pathogenic organisms in the following points:

a. That this organism was capable of forming a scum in a single night;

b. That it grew abundantly in the presence of several species of septic organisms.

A further point which raised a doubt in my mind as to this organism being the cause of scarlet fever was the locality from which it was obtained. An objection, moreover, which I felt might fairly be urged to the conclusions arrived at was the absence of all control experiments with the scales of epidermis obtained either from the healthy or from certain irritative conditions of the skin.

With the view of supplementing the paper in this respect, I commenced a series of experiments with the scales of epidermis taken from the tibial surface of the leg, and, as might be expected, obtained growths of various kinds of organisms, amongst them being motile bacilli.

An opportunity presenting itself of obtaining good epidermic scales from a case of Sudamina, I made gelatine-plate cultivations with these in the ordinary way and with the usual precautions; in the course of twenty-four hours, evidence of growth was clearly manifest; after a further interval of twenty-four hours, in each of the plates a number of small whitish dots were seen, together with numerous points of clear, liquefied gelatine; upon the microscopical examination of these I found the former to consist of micrococci, and the latter of motile bacilli, which presented a striking resemblance to the representation given of the bacillus scarlatinæ in Fig. 10 of the plate illustrating the before-mentioned paper.

To procure a pure growth of this organism, I made further plate-cultivations, and succeeded in obtaining such a growth. From this, again, gelatine in test-tubes and broth in test-tubes were inoculated, and the characters of the bacilli thus obtained, both in microscopical specimens and in their different cultures, can best be given in the words descriptive of the "Bacillus scarlatinæ" (see JOURNAL, June 11th, 1887, page 1265):

"Rods measuring 0.4μ in thickness and 1.2μ — 1.4μ in length, most usually forming excessively long-jointed and curved leptothrix filaments, motile. Sown on gelatine-plates it forms little points of