—whether dead or alive—we are giving important assistance to the patient, provided it can be done without irritation of the delicate and inflamed membrane, and also without conveying the infection into deeper and uninvaded parts. The most important gonococci are those multiplying in and inflaming the mucous glands and follicles and their ducts, and these can only be voided after they have become conveyed into the main urethral channel, whence they flow out in the discharge or are swept out in the escaping urine. I believe that gonococci while in the gland recesses are not accessible by any fluid led into the urethra.

If, however, we can provide an agency which actuates the secretory flow from within these spaces towards and into the main channel, we shall produce an evacuation of these gonococcal dépôts, and in a series of such operations we shall subdue the disease. Such, of course, is the sequence of events effected in the method of electrolysis. The numbers of pus plugs, so to speak, visibly projecting from the catheter perforations at the end of half an hour of electrolysis may amount to 1 drachm in volume after settling in a measure glass. Microscopically, their composition can be seen to be of gonococci in large numbers with as many leucocytes involved in a matrix of mucus. It is significant, also, that this quantity of morbid material has been obtained after a urinary voidance (a natural lavage of the urethra), and it was not obtainable by that agency. It is also noteworthy that as the spontaneous discharge diminishes from day to day the material obtained in this way is correspondingly reduced. Naturally, the final event constituting recovery in any case is the phagocytosis of the last gonococcus, and this occurrence can be recognized by no human eye. Before this, however, all spontaneous discharge will have ceased and the microscope is now invaluable for scrutiny of the threads in the urine. These threads—which soon become mere wisps of mucus—are made into Gram-stained films and searched for gonococci; and if more than one test of the all-night urine shows their absence, there will almost certainly be no relapse. Apart from care in the conduct of the method, some experience is required to know when to stop the local treatment; but judgement improves with practice in this particular. Everyone likes to find his prognosis verified, but the proof of the cure is only obtainable by the evidence of no relapse nor conveyance of the disease for months or years afterwards.

I believe that in electrolysis we have the most elaborate and the most rapid, but the least painful, of any local treatment for this disease. It is also remarkable that in nearly two hundred cases I have only met one case of arthritis arising during electrolysis. The special interest in that case was the incision of an abscess before I began the treatment. This immunity from arthritis is a matter I cannot explain at present, but it is, I believe, important. Stricture of course does not occur, as there is no ulceration induced in the urethra. If cases are treated early it is rare for the infection to reach the deep urethra, and the process gives us a decisive control over the disease which is maintained up to recovery.

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THE THERAPEUTIC EFFECTS OF COLLOIDAL PREPARATIONS.

BY

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(Preliminary Note.)

THE invitation from the Editor of the *BRITISH MEDICAL JOURNAL* to relate my experience of the therapeutic effects of drugs in the colloidal state is one to which I willingly respond.¹ For more than a year, I have been employing the collosol preparations of the Crookes Laboratories, and have had results which leave me in no doubt as to their superiority—I must say, with every desire to avoid the appearance of exaggeration, their great superiority—to the same drugs in the non-colloidal form. They are results

which make it an obvious duty to suggest that trial on a large scale ought to be given to a form of medication which promises to effect a pharmacological revolution.

In cutaneous affections, as every dermatologist knows, the drawbacks to the use of argenteum are the pain which it causes and the discoloration which it leaves behind. With collosol silver these effects are entirely absent; instead of producing irritation, indeed, it has a distinctly soothing effect. It rapidly subdues inflammation and promotes the healing of lesions. I have had remarkable results in enlarged prostate with irritation of the bladder, in pruritus ani and perineal eczema, and in haemorrhoids. It can be used in the form of suppositories while a solution is applied to the irritated skin. In bromidrosis in the axillae and feet it quickly gives relief. It also causes a rapid disappearance of warts. Being non-toxic, it can be given internally in urticaria and other forms of dermatitis which are suggestive of toxæmia. In such cases it is quickly beneficial, as it is also in diarrhoea.

Of collosol iodine, which, like collosol silver, is non-irritating and produces no stain, I have proved the efficacy in certain forms of eczema, and in some of those cases of bad chilblains which have been so numerous this winter. In a severe case of chilblains in the first stage, that of a woman of 37 whose fingers were so swollen that they looked like sausages, under the application of collosol iodine oil rubbed in four or five times a day every trace of the condition disappeared in four days. Equally valuable is this collosol in severe cases of trench feet with ulceration, in which it is also an excellent prophylactic. It is most useful, too, in the many cases of Charcot's bedsores which are so troublesome a complication of spinal injuries in military hospitals. In the earlier inflammatory stages of lupus erythematosus, before atrophy has supervened, it is far more suitable than the ordinary form of the drug because of the absence of irritation. Similarly, it is to be preferred for internal administration in the later stage of syphilis, because the practitioner may dismiss from his mind all fear of evoking symptoms of iodism. Parasitic affections, again, show a striking amenability to this remedy. In a case of rhobie's itch, in which the disease had spread from the groins and invaded the trunk, legs, and arms, under the quite painless application of collosol iodine oil the extensive lesions all cleared up in three weeks; with ordinary remedies the case would undoubtedly have been more protracted, and the treatment would inevitably have put the patient to a good deal of pain.

Among the affections in which collosol sulphur is beneficial are various forms of acne, including acne rosacea, and seborrhoea. For the relief of generalized dermatitis, in acute psoriasis, and in painful fibrositis, whether of connective tissue, of muscle, or of joints, baths medicated with this collosol are, in my experience, at once soothing and quickly curative. In the case of an officer from the front who was crippled with fibrositis and had severe eczema, a daily collosol sulphur bath relieved him of all his symptoms in a week.

These are not the only collosols with which I have had gratifying results, but on this occasion I need not go further into detail. I have said enough, I hope, to show that these preparations, to put the case at its lowest, mark a very considerable advance in therapeutics. They act with singular rapidity, they are free of disadvantages inseparable from the same drugs in the ordinary state, and their extensive use would effect an enormous economy in drug consumption—a not unimportant consideration at a time when there is not enough of many medicinal substances to go round.

REFERENCE.

¹ *BRITISH MEDICAL JOURNAL*, May 5th, 1917, p. 585.

MESSRS. GRAHAM AND LATHAM, LTD., military engineers, 104, Victoria Street, London, S.W., have sent us a sample of the "Swarren crutch seat." It is made of webbing three inches wide, with plated steel clips at each end for fixing to the hand-pieces of standard crutches. When not in use the crutch seat can be folded up and carried in the pocket. It is strongly and simply made, and provides a ready means of rest for wounded soldiers and others who have to walk with crutches. We are informed that the catalogue price of 7s. 6d. is subject to substantial discount to Red Cross and allied organizations.