

ergot or iron and plugging the vagina, it will be much more rational to remove as much of the diseased mass as may be deemed prudent, with the *écraseur* or curette, or both combined, and then to apply either the liquor ferri perchloridi fortior, the persulphate of iron or the actual cautery.

TREATMENT OF VARICOSE ULCERS OF THE LEG BY LEVIGATED SUB-NITRATE OF BISMUTH.

It was not my intention to make this report to-day, wishing before doing so to carefully record the result of a large number of cases treated by this method.

Having already treated *twenty* cases *successfully*, with the sub-nitrate of bismuth, I have only carefully written out the last. This is, however, a typical and conclusive case. I think this case will show conclusively the efficacy of this remedy in certain ulcers, especially in those of varicose origin.

I propose to continue the use of this treatment and to report the results, at some future meetings.

Before approaching the subject proper of these remarks, I deem it useful to briefly review with you the varied methods now followed in the treatment of these ulcers.

1. *Antiphlogistics* were advised, but they are subject to many objections in certain cases.

2. *Stimulants*, such as aromatic wine, ointments of styras, divers preparations containing red precipitate, solutions of vinegar of different strengths, various mineral acids more or less diluted; solutions of soap, more or less saturated; solutions of nitrate of silver, perchloride of iron, chloride of lime, blisters, carded cotton, and even the red-hot iron.

All of the above remedies are occasionally useful, but are frequently attended with many disadvantages in their use.

3. The *water dressing* as used in England.

4. Methodical compression, as effected by carefully applied flannel bandages, or by strips of adhesive plaster, or emplastrum vigo.

5. Electricity.

6. *Incisions*, in cases of retarded cicatrization.

7. *Destruction* of the dilated veins.

8. Lastly, by *skin grafting*.

I now reach the use of the sub-nitrate of bismuth, of the efficacy of which I was ignorant, until its use was so highly recommended by my friend and colleague, Dr. Mary Durand. The method of its application is as follows:

The bismuth is levigated, which means reduced to an *impalpable* powder, the ulcers and surrounding skin are carefully sprinkled with this powder to a thickness of several lines (3 mm.); over this a light pad of cotton wadding, retained in situ by

a bandage applied sufficiently tight to create slight compression.

The limb is then placed in a slightly bent position, and absolute rest enjoined. At the end of three or four days this first dressing is removed. If there is found a commencement of cicatrization, which is frequently the case, the *adherent* scabs are respected, and those that are loose carefully removed. The same dressing is renewed, without washing or cleansing. The third dressing is made after a lapse of three or four days, according to the case. When the process of cicatrization is progressing favorably, dressings are renewed at much longer intervals. After the cicatrization is completed, for several days cold douches are practiced, upon the cicatrix, to strengthen the tissues, these douches are made with an irrigator, or other suitable instrument.

Mode of action.—According to Monnerat, Gintrac and others, sub-nitrate of bismuth is most generally an inert substance, covering the diseased parts, and affording mechanical protection as it were, against all causes of irritation, similar to that afforded by greasy applications, collodion, and salves generally. Sometimes, however, bismuth becomes a chemical agent, combining with the gaseous emanations, watery exudation, mucus, or acid, and acts as a disinfectant.

This chemical action is proved in the intestinal canal by the production of the sulphide of bismuth, and by another circumstance that the *curative* and beneficial effects of bismuth are never more evident than when the dejections are blackened and sulphurous.

I am not certain that the action of the sub-nitrate of bismuth may not be due in some measure to the presence of a certain amount of acid, which it almost always contains in the ordinary specimens found in commerce.

To whatsoever it may be ascribed, the first effects of bismuth locally applied certainly are to rapidly reduce inflammation, relieve pain, and diminish secretion.

Certainly the position of the limb, rest and light bandaging, may be considered useful adjuncts in the process of cure. I have witnessed, however, in the *Invalides* under the care of Dr. Mary Durand, the use of the same treatment with the bismuth, the patients allowed to walk and take exercise while under treatment, where the cure was *delayed*, but not prevented.

In making this communication it is not my object to present a new remedy, possessing infallible action in all cases. No. I wish simply to call attention to a remedy possessing many qualities to recommend its trial in *varicose ulcers*, where the *rapidity of action*, and the infrequency of repeating dressings, are real advantages over many others *hitherto* employed.—*Journal de Médecine*, abridged from the *New Orleans Medical and Surgical Journal*, Feb., 1883.