

Sometimes he uses a solution in the strength of one ounce of the salt to two or three ounces of distilled water as an application to ulcerated surfaces. Chronic uterine catarrh, or inflammation of the mucous membrane of the cervix, without the slightest abrasion, the membrane of a dusky, livid hue, tender, and secreting pus, may last for years, but generally leads to denudation of the villi, and gives an excoriated appearance. This, with or without excoriation, can be cured by the solution every fourth day, and the solid nitrate occasionally. In obstinate cases, a small portion of the solid stick may be left in the canal.

In vaginitis, the injection is best. The patient should be placed on her back, a small glass speculum introduced as far as possible, and an ordinary glass syringe, full of a solution of forty grains to the ounce, injected. The fluid should be left in contact for five minutes, and then received in a cup. Sometimes as he withdraws the speculum he freely touches the vagina with the solid nitrate diluted by chloride of silver. Especially are these injections applicable in virgins, where a moderate-sized speculum cannot be introduced.

In consequence of the serious accidents following the injection of this article into the womb, he prefers tincture of iodine in solution as an intra-uterine injection. In follicular inflammation of the labia, in eczema and prurigo, or pruritus, external or internal, cotton wool should be soaked in the solution of the nitrate of silver, and carefully rubbed over the diseased surfaces for a few minutes. Even where the disease had existed so long that the pudendal skin felt like parchment, and rubbed in every day, then every other day, then every fourth day, the skin became soft and pliable, and all the pain disappeared in a few months.

His experience teaches him that this agent is *not a caustic*; it only condenses tissues, without reducing their bulk. It may cause stricture, but only by this action.

*Tincture of iodine* suits some idiosyncrasies better, and may be used in the strength of one drachm to an ounce of distilled water. It is much less useful than the nitrate of silver.

Ulceration of the cervix may be much shortened by one or two applications of acid nitrate of mercury or potassa cum calce. Infungous and varicose ulceration, these remedies stop the bleeding and promote the cure. In diphtheritic inflammation of these parts, nitrate of silver acts as a poison, but the potassa cum calce effects a cure.—(*Lancet*, Feb. 2 and 23, 1861.)

## THE FUNCTIONS OF THE PLACENTA.

By V. NIVET, D.M.P., of Clermont Ferrand.

M. Nivet, in a letter to Prof. Courty, takes issue with him on the ground that he has declared the placenta to be exclusively an organ of absorption and nutrition. M. Nivet maintains that it is also an organ of sanguification. He explains this as meaning that function which has for its purpose the adding of oxygen to the blood which traverses the capillaries of certain organs; the result is that the globules, become redder and the blood warmer. This function is direct or indirect. In the direct, the black blood, which has furnished materials to the organs of secretion and nutrition, comes in contact with the atmosphere, or with a liquid containing oxygen, which gas unites with it.

In the indirect, the organ (the liver for example) carries from the blood materials charged with carbon, (the bile,) causes the oxygen to predominate in the particles dissolved in the blood of the hepatic veins. The villousities or divisions of the cotyledons of the placenta are formed of tubes terminating in a cul-de-sac in the uterine sinuses. These tubes contain each a ramification of one of the umbilical arteries, which forms a loop by anastomosing with the umbilical vein. This loop represents the capillary net-work of the lungs, or more exactly that of the veins and arteries of the gills of animals which