

birth to or suckled a child for years, the mode of treatment adopted is as follows:—Two or three handfuls of the leaves of the Ricinus are taken and treated as before. The decoction is poured, while yet boiling, into a large vessel, over which the woman sits, so as to receive the vapour over her thighs and generative organs, cloths being carefully tucked around her, so as to prevent the escape of the steam. In this position she remains for ten or twelve minutes, or until the decoction cooling a little, she is enabled to bathe the parts with it, which she does for fifteen or twenty minutes more. The breasts are then similarly bathed, and gently rubbed with the hands; and the leaves are afterwards applied to them in the manner already described. These several operations are repeated three times during the first day; on the second day, the woman has her breasts bathed, the leaves applied, and the rubbing repeated three or four times. On the third day, the sitting over the steam, the rubbing, and the application of the leaves too, with the fomentation of the breasts, are again had recourse to. A child is now put to the nipple; and in the majority of instances, it finds an abundant supply of milk. In the event of milk not being secreted on the third day, the same treatment is continued for another day; and if then there still be want of success, the case is abandoned, as the person is supposed not to be susceptible to the influence of the Hofareira.

Women with well developed breasts are most easily affected by the Hofareira; when small and shrivelled, the plant is said to act more on the uterine system, bringing on the menses, if their period be distant, or causing their immoderate flow, if their advent be near.

Dr. McWilliam gives the cases of three women in whose breasts milk was induced by the employment of the Hofareira; in all of which pregnancy had occurred some years previously.

Dr. Tyler Smith has made some experiments upon the use of this plant. He tried the effects of the leaves in five cases, in three of which it proved successful. In one it produced a copious flow of the catamenia, in another leucorrhœa. From his experiments he believes that the castor-oil leaves, applied externally, have distinct galactagogue effects. He followed out in his experiments the descriptions given and quoted above from Dr. Williams' paper, but did not apply the steam of the decoction to the generative organs; nor does he appear to have given it internally.

I believe I am the first who has used castor-oil leaves and stalks internally as a decoction in this country. I was led to do so from having frequently observed that suckling women, after taking a dose of castor-oil, noticed that they secreted a larger quantity of milk, a result which I certainly cannot entirely attribute to the removal of accumulated fecal matters; because I have not seen the same full effect from the use of other purgatives. Dr. Tyler Smith alludes to this effect having been noticed by others, although, he adds, it may do this by moderating febrile excitement. It occurred to me, therefore, that in defective lactation, the exhibition of castor-oil leaves and stalks in a decoction might produce, or more directly cause, a flow of milk. I have now given the remedy in several cases, and I must say I have not been disappointed. The flow has been remarkably increased. A few objections against its use, however, should be mentioned.

Some patients complain while taking it of a sensation in the eyes, not exactly amounting to pain, but accompanied with dimness of sight. I do not think this is due to any peculiar effect of the castor-oil plant. I have only noticed it in weak women; and rather attribute it to the force of the flow of the secretion, an effect exactly analogous to that which is observed in nurses who have suckled too long, when the child takes the breast.

A second is that the dose after a time requires to be much increased, as the remedy appears to lose its effect. A temporary suspension, and the substitution of another galactagogue, remedies this inconvenience.

A third objection is the difficulty in procuring the leaves or stalks in sufficient quantity. It appears that they are not imported into the country and all those that can be obtained are produced from botanical gardens. The larger number employed by me came from that of Mr. Butler, of Covent-Garden. The importance of this remedy as a galactagogue, will doubtless ere long cause its importation, or growth in larger quantities.

The last objection applies to an occasional effect observed after its administration. The roots of the decoction were before said to be diuretic. The leaves in decoction are occasionally so also. I have heard of two examples. In the one so far as I could hear, a large quantity of water was daily passed under its influence, and it did not appear to produce any increase of the secretion of milk. In this case, however, I am not aware if the breasts were kept warm. If not, it is conceivable that an effect similar to that observed with diaphoretic should occur. These remedies, it is known, will not act as sudorifics if the surface of the skin be kept cool, but as diuretics. If an analogous explanation applies to galactagogues, it points out the importance of keeping the breasts very warm when the decoction of castor-oil leaves is given internally. Moreover, we are led to this mode of management by noting the manner in which the remedy is employed in Bonavista. Hot fomentations of the leaves are there always applied locally to the mammary region. Where this diuretic effect is produced, it is well therefore to smear the exterior of the leaves over the breast in the same manner as a belladonna extract is sometimes used, with warm ordinary poultice outside it, and this combination will probably fulfil all the indications in the treatment. In the second case, both the secretion of the urine and the milk were much increased, and to such an extent as to make it obligatory for the sake of the patient's strength to discontinue it. I am not aware, as both of these cases occurred in the practice of others, whether hot fomentations were also applied to the breasts. The breasts as a rule should always be kept warm, when this remedy is given; and when the diuretic effect is produced, not only kept warm with poultices, but smeared over with extract.

When the castor-oil leaves are given as an induction to women who are not suckling, I have observed two effects, both of which seem to denote its specific action. First, it produces internal pain in the breasts, which lasts for three or four days. Then a copious leucorrhœal discharge takes place, after which the effect on the breasts entirely disappears. During the duration of the pain at the breast I make no doubt that, if a child had been applied, the suction would have determined the lacteal secretion. This, however, is an experimen-