

## LONDON MEDICAL JOURNAL.

I. *Some Observations on the medicinal Effects of the Lichen Islandicus and Arnica Montana. Communicated in a Letter to Samuel Foarr Simmons, M. D. F. R. S., by Alexander Crichton, M. D.* ✓✓

I HAVE the honour of sending you enclosed some observations, written with a view to ascertain the medicinal qualities of the lichen islandicus and arnica montana, two remedies at present but little known to the medical practitioners of this island.

What principally induces me to trouble you with this account is, that, in a celebrated and justly-admired work on the materia medica, which has lately made its appearance, and in which one might naturally have expected an account of every thing new on the subject, no mention whatever is made of the first of these remedies; and for an account of the second, or arnica montana, the learned author refers his readers entirely to the account given  
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of it by Dr. Collin, of Vienna. But as, in my opinion, Professor Collin has endeavoured to raise too high expectations of this medicine, and has ascribed to it too extensive and general powers, I am desirous to prevent, as much as lays in my power, any disappointment which may be experienced in the use of it, by stating to you the opinions of other physicians concerning the arnica, and relating what I myself have had occasion to witness of its effects.

*Of the Lichen Islandicus.*

When the lichen islandicus is boiled or infused in water, it yields a very thick mucilage, of a penetrating bitter and somewhat astringent taste; qualities which might induce one *a priori* to suppose it possessed of good medicinal qualities.

In dysentery, in certain species and periods of phthisis pulmonalis and hectic fever, and in that troublesome and obstinate cough which remains after the measles, this remedy has been greatly, and, in my opinion, deservedly extolled, not only by many of the German, but by some of the Swedish and French physicians. At the same time its use even in those countries seems to be far from being general; many  
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looking upon it both as a very inefficacious and hurtful medicine. The truth is, the diseases in which this remedy has been so much recommended differ so greatly, not only at different times, but in each individual from the peculiarities of constitution, that some difference in the treatment is absolutely requisite; and medicines which are proper in one case, and in one stage of these diseases, are altogether improper in others. But, unhappily, most of those who have written any thing about the virtues of the lichen islandicus, if we except Dr. Marcus Herz, of Berlin, have been but little accurate in their accounts respecting the species of the diseases in which this remedy has been found useful, or the time best calculated for its administration: hence we may easily account for its inefficacy in the hands of some, and its injurious effects in those of others.

In dysentery there are certain circumstances which certainly forbid the use of the lichen islandicus. Among the principal of these may be mentioned a fixed pain in any part of the abdomen, especially if the pulse at the same time is quick and hard, the skin hot, and the patient thirsty; and indeed it ought never to

be administered where the physician suspects any inflammatory affection; neither should it be exhibited in any case in which, from the appearance of the stools, the uneasiness of the patient, and the frequency of the tormina, it may be supposed that a quantity of hardened faeces remains in any part of the tract of the intestinal canal.

The sum of the symptoms which the patients laboured under, whom I either saw or heard of being cured by the lichen islandicus, amounts to the following:—perfectly liquid, frequent, and more or less bloody stools, attended with tenesmus and tormina, sometimes very violent and distressing; a quick, but not a hard pulse, often soft and feeble; great and universal debility; and loss of appetite.

I have seen patients labouring under the greatest complication of these symptoms entirely cured by the lichen; and Dr. Herz, in his Letters addressed to Physicians\*, enumerates a number of similar cases also cured by it.

This celebrated physician, who gives an excellent and candid statement of the effects which he has experienced from it, accompanied

\* Briefe an Aerzte.



with the history of some of the cases, says, that, from the time when he first used this remedy in dysentery, he has never had occasion to have recourse to any other. — “As soon,” says the Doctor, “as I have sufficiently cleansed the stomach and intestines, I betake myself to the lichen islandicus; only that, according to taste, or other circumstances, I sometimes join a syrup to it, and now and then a little opium.”

In Vienna the lichen islandicus is held in high estimation in the phthisis pulmonalis, a disease exceedingly frequent in that city. During a seven-months stay there, and a pretty constant attendance at the General Hospital, I had frequent opportunities of seeing this remedy tried for the cure of the disease alluded to. I am sorry, however, to be obliged to confess, that it by no means answered the expectation I had formed of it.

From what I have seen, I am fully convinced, in my own mind, that there are only two species of this disease where this sort of lichen promises a cure. The two species I hint at are, the *phthisis hæmoptoica*, and the *phthisis pituitosa* or *mucosa*. In several cases of these I have seen the patients so far get the better of

their complaints as to be dismissed the hospital cured; but whether they remained long so or not I cannot take upon me to say.

In both these species of phthisis the lichen islandicus is inadmissible, should there be a fixed pain in any part of the thorax, increased by a deep inspiration, and attended with a quick and hard pulse. The reason of this will be evident to any one who considers the cause of such symptoms, and the general effects of this lichen.

The cases of phthisis hæmoptoica, which I thought were cured by it, have not been very numerous. In some I have seen it fail, especially in such as seemed strongly predisposed to this disease by their original conformation: but where the rupture of the blood vessels of the lungs seemed to have arisen accidentally from external violence, from exertions, or from passion, and where the wound had run into suppuration from neglect, or an injudicious treatment, if the patient was not otherwise much predisposed to the disease, and his strength already not greatly exhausted, the lichen islandicus had always the happiest effect.

The good qualities of the lichen islandicus are more certain and constant in the phthisis pituitosa.



pituitosa, as it is called. I am afraid, however, that in this country we shall find less benefit from this medicine, in consumptive cases, than may by many be expected, as I am confident that, on an average, nine cases out of ten of our consumptions are owing to a scrophulous affection of the lungs. In this species, commonly distinguished by the name of *phthisis tuberculosa*, I have often seen trials made with this remedy, and, I am sorry to add, have as often seen it fail. Dr. Herz, of Berlin, whom I have already spoken of, takes also particular notice of this; but mentions the success he has derived from it in the *phthisis hæmoptoica*, and gives a history of some of the cases to strengthen his assertion. It is on the authority of this gentleman alone that I pretend to recommend the lichen to the attention of your readers in the cough which, now and then, remains so obstinately, for a length of time, after the measles.

The lichen islandicus is commonly given in the form of a decoction; an ounce and a half of the lichen being boiled in a quart of milk. Of this a tea-cupful is directed to be drank frequently in the course of the day. If milk disagrees with the patient's stomach, a simple

decoction of the lichen in water will answer very well. Care ought to be taken that it be boiled over a slow fire, and not longer than a quarter of an hour, as it is apt otherwise to lose some of its qualities.

The lichen seems always to have one evident effect, that of strengthening the powers of digestion, and indeed of the whole system.

In dysentery its peculiar evident effects seemed to be to alleviate the tormina, and that often very quickly; to diminish the frequency of the stools, and to change them to a more natural consistence.

In phthisis its good effects are pointed out by an amelioration of the matter expectorated; by diminishing the frequency of coughing, and rendering it also easier; by diminishing the irritability of the patient; and preventing or gradually moderating the hectic fever.

#### *Of the Arnica Montana.*

The arnica montana has a penetrating bitter and somewhat aromatic taste, which is stronger in the flowers than in the leaves, and weakest in the root.

Dr. Collin, of Vienna, in the years 1773 and 1775, endeavoured to recal this plant from  
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oblivion by the publication of a number of cases, and experiments made with a view to ascertain its qualities\*. The result of the cases which he gives us tends to prove the arnica to be a very useful and efficacious remedy in putrid fevers, intermittents, palsies, tremors, and amaurosis.

It is, however, to be much lamented that Dr. Collin, from an over anxiety to stamp a high character on the arnica, seldom informs us of any of the cases but those in which it succeeded.

In putrid fever I am happy to say I can strengthen his assertions, at least as far as my word will have any credit. With Professor Stoll, whose practice I had an opportunity of witnessing for four months previous to his death, the arnica was a favourite remedy in the disease alluded to; and not only with him, but with other physicians of the General Hospital of Vienna, I have seen it succeed wonderfully well. Even in the worst stages, where the pulse has been exceedingly weak, small, and quick, where

\* Vide Henr. Joseph. Collin *Observ. circa morbos acutos et chronicos*, Part. IV. Vienn. 1773, et ejusdem libri Part. V. *ibid.* 1775.

innumerable petechiæ have appeared, and even where the patients seemed exhausted by a colliquative diarrhœa, this remedy generally produced the happiest effects. Dr. Stoll, however, gave it in much larger doses than Dr. Collin recommends beginning with.

Effects similar to those just mentioned I had again an opportunity of witnessing last summer, when attending the Clinical Hospital at Göttingen. Professor Fischer, who is physician to that hospital, assured me that he had often experienced the happiest effects from it, both as an antiseptic and tonic remedy. I should be very sorry were it to be understood from what I have said concerning this plant, that I am anxious to stamp a higher value on it, as an antiseptic and tonic remedy, than on any other in common practice. The cases in which I have seen it tried are not numerous enough to authorise my doing so were I inclined. All I can say is, that in this disease I do not recollect to have seen any other medicine necessary when the arnica was freely and properly exhibited.

As to its effects in intermittents, I cannot speak from my own experience: but as it may afford some satisfaction to your readers to know the result of the trials made with it in this disease,



case, I shall take the liberty of transcribing here such of my notes as relate either to what I have learnt from the conversation of foreign physicians on this subject, or to what I have extracted from their writings.

Dr. Collin, in the fifth part of his *Observationes* &c. says he has cured thirty-eight quotidians, forty-six tertians, and fifty-eight quartans, with the arnica. His dose of the extract was about a drachm per diem.

Dr. Sebold, Professor of the Clinical Institution at Prague, assured me, whilst there in September, 1787, that, in the cure of intermittents, after cleansing the primæ viæ, he trusted entirely to the arnica and flowers of chamomile, and that in the many cases which had occurred to him of this disease this method had never disappointed his expectations.

In Jutland this plant is a common domestic remedy in the ague, and held in great esteem\*. Dr. Manger says he has frequently experienced the best effects from an infusion of half an handful of the flowers drank two hours before the access of the paroxysm. All this tends, in my

\* Vide Gesner's *Entdeckungen in der Arzneiwissenschaft*, 3 B. 2 theil.

opinion, to prove the tonic qualities of the arnica.

It has been much recommended in palsies and tremors; but I only remember to have seen one case of each of these diseases got the better of under the administration of the arnica; and even in these cases the arnica, perhaps, had not the sole merit of the cure: for in the one it was joined to the use of valerian, and in the other to that of camphor. In two or three other similar cases which I saw treated with the arnica, during my stay at Vienna, it failed.

Dr. Collin says he has cured nine cases of amaurosis with it.

Dr. Richter, the celebrated professor of surgery at Gottingen, who has a great deal of practice in diseases of the eyes, says, that he has tried the arnica very often in this disease, but that it did not answer his purpose so well as it seems to have done Professor Collin's, although he confesses it to have been now and then of service\*.

Having now stated to you, as concisely as I possibly could, such information as I think may

\* Richter's Chirurg. Bibliothek, 2 Band, Gottingen, 1772.



throw some light on the medicinal qualities of the arnica, I shall only add a few words more on the different methods of exhibiting it, and on its apparent effects.

Either the whole plant may be used, or its flowers, or roots, in the form of a powder, decoction, infusion, or extract.

The whole plant is generally used in infusion or decoction, in the proportion of an ounce of it to a pound and a half of water; which quantity may be given, in doses of a cupful, in the course of the day.

Of the flowers two or three drachms daily will, at first, in most cases, be sufficient; although I have seen near an ounce of them taken in the space of twenty-four hours.

The extract made from the whole plant, which, in my opinion, is by far the most elegant and commodious way of exhibiting it, may be given at first to the extent of a drachm *per diem*.

The arnica, especially its flowers, produces often very disagreeable and uneasy sensations to the patient. The chief and most common of these are, a sharp pricking sensation over the whole surface of the body, an uneasy sensation at the region of the stomach, sometimes accom-

panied with cardialgia, and with slight convulsive shocks, resembling those produced by electricity.

Another very curious and pretty constant effect of the arnica is that of its indicating the place where any injury has taken place, from an external cause, by augmenting the pain in the part, should any exist; or by renewing it, should it have only lately quitted the patient.

It may be remarked, that the root seldom produces any of these disagreeable symptoms; whereas the flowers of the arnica seldom fail to do so. When these symptoms do take place, it is always looked upon as a sure sign of the remedy's taking a proper effect; therefore its use ought not to be discontinued on that account. A little of the extract of gentian generally prevents its occasioning the uneasiness at the stomach whilst it co-operates in its effects.

The arnica almost uniformly increases the strength, but not the velocity, of the pulse.

*Oxford Court, Cannon Street,*

June 23, 1789.

II. *Obser-*