

nomy, are the best Foundation, upon which we can safely proceed in the Practice of Physick.

II. *An Abstract of part of a Letter from Dr Bonomo to Signior Redi, containing some Observations concerning the Worms of Humane Bodies. By Richard Mead, M. D.*

HAVING frequently observed that the Poor Women when their Children are troubled with the *Itch*, do with the point of a Pin pull out of the Scabby Skin little Bladders of Water, and crack them like Fleas upon their Nails; and that the Scabby Slaves in the *Bagno* at *Leghorne* do often practice this Mutual Kindness upon one another; it came into my Mind to examine what these *Bladders* might really be.

I quickly found an *Itchy* person, and asking him where he felt the greatest and most acute *Itching*, he pointed to a great many little *Pustules* not yet Scabb'd over, of which picking out one with a very fine Needle, and squeezing from it a thin Water, I took out a very small white *Globule*, scarcely discernible: Observing this with a Microscope, I found it to be a very minute Living Creature, in shape resembling a Tortoise, of whitish colour, a little dark upon the Back, with some thin and long Hairs, of nimble motion, with six Feet, a sharp Head, with two little Horns at the end of the Snout; as is represented in Fig. 1 and 3.

Not satisfied with the first Discovery, I repeated the search in several *Itchy* persons, of different Age, Complexion and Sex, and at differing seasons of the year, and in all found the same Animals; and that in most of the Watery *Pustules*,

Pustules, for now and then in some few, I could not see any.

And tho by reason of their minuteness, and colour the same with the Skin, 'tis hard to discern these Creatures upon the Surface of the Body, nevertheless I have sometimes seen them upon the Joynts of the Fingers in the little Furrows of the *Cuticula*, where with their sharp Head they first begin to enter, and by this Gnawing and Working in with their Body, they cause a most troublesome *Itching*, till they are got quite under the *Cuticula*; and then 'tis easy to see how they make ways from place to place by their biting and eating, one single one happening sometimes to make several *Pustules*, of which I have often found two or three together, and for the most part very near to one another.

With great earnestness I examined whether or no these Animalcules laid Eggs, and after many enquiries, at last by good Fortune while I was drawing the Figure of one of 'em by a Microscope, from the hinder part I saw drop a very small and scarcely visible white Egg, almost Transparent, and oblong, like to the Seed of a Pine-apple, as is seen in Fig. 2 and 4.

I oftentimes found these Eggs afterwards, from which no doubt these Creatures are generated, as all others are, that is, from a Male and Female, tho I have not yet been able by any difference of Figure to distinguish the Sex of these Animals.

From this Discovery it may be no difficult matter to give a more Rational account of the *Itch*, than Authors have hitherto delivered us. It being very probable that this contagious Disease owes its origin neither to the Melancholy Humour of *Galen*, nor the corrosive acid of *Sylvius*, nor the particular Ferment of *Van Helmont*, nor the Irritating Salts in the *Serum* or *Lympha* of the Moderns, but is no other than the continual biting of these Animalcules in the Skin, by means of which some portion of the *Serum* oozing out

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thro the small apertures of the Cutis, little watery Badders are made, within which the Insects continuing to Gnaw, the infected are forced to scratch, and by scratching increase the Mischief, and thus renew the troublesome work, breaking not only the little Pustules, but the Skin too, and some little Blood Vessels, and so making Scabs, Crusty Sores, and such like filthy Symptoms.

From hence we come to understand how the *Itch* proves to be a Distemper so very catching; since these Creatures by simple contact can easily pass from one body to another, their motion being wonderfully swift, and they as well crawling upon the surface of the Body as under the *Cuticula*, being very apt to stick to every thing that touches 'em, and a very few of them being once lodged, they multiply apace by the Eggs which they lay.

Neither is it any wonder if this infection be propagated by the means of Sheets, Towels, Handkerchiefs, Gloves, &c. used by Itchy persons; it being easy enough for some of these Creepers to be lodged in such things as those; and indeed I have observed that they will live out of the Body 2 or 3 days.

Nor in the last place shall we be at a loss to know the reason of the cure of this Malady by Lixivial Washes, Baths, and Ointments made up with Salts, Sulphurs, Vitriols, Mercury's, Simple, Præcipitate or Sublimate, and such sort of corrosive and penetrating Medicines. These being infallibly powerful to kill the Vermin lodged in the Cavities of the Skin; which scratching will never do, partly by reason of their hardness, and partly because they are so minute as scarcely to be found by the Nails.

Neither do inward Medicines perform any real service in this Case, it being always necessary after a tedious use of these to have recourse to those external ones already mentioned. And if in Practice we oftentimes Experience, that this Disease, when we think it is quite cured by Unction, does nevertheless in a short time return again, this is not strange

strange, since tho the Oyntment may have killed all the Living Creatures, yet it may not probably have destroyed all their Eggs, laid as it were in the Nests of the Skin, from which they may afterwards breed again and renew the Distemper. And upon this account, 'tis very advisable after the Cure is once performed, still to continue the Anointing for a day or two more; which it is the easier to do, because these Liniments may be made agreeable enough, and of a good smell, as particularly is that compounded of the Ointment of Orange Flowers or Roses, and a small quantity of red Præcipitate.

III. *Observatio de portione intestini canis feliciter abscissa,* a Joanne Shipton, *Chirurgiæ Studioſo.*

INtestinorum vulnera, crassorum quidem ut plurimum; tenuium verò semper lethalia esse, ab omni retro Antiquitate traditum est.

Acerbam de ijs *Divinus Senex* fert sententiam. *Aph. 18. lib. 6.* Κῶςιν διακοπέντι, ἢ ἐγκέφαλον, ἢ καρδίαν, ἢ φρένας, ἢ τῶν ἐντέρων τι τῶν λεπτῶν, ἢ κοιλίην, ἢ ἢ θανάτωδες. *Ejusdem etiam lib. Aph. 24.* Ἐστέρων ἢ διακοπῇ τῶν λεπτῶν τι, ἔξυμφύεται.

Omnem etiam eis spem adimit *Romanus Hippocrates, C. Celsus*, de ejusmodi vulneribus sequentia prædicens, *lib. 5. cap. 26.* *Servari non potest cui basis cerebri, cui cor, cui Stomachus, cui iocinoris portæ, cui in spina medulla percussa est, cuiq; aut pulmo medius, aut jejunum, aut tenuius intestinum, aut ventriculus, aut renes vulnerati sunt, cuive circa fauces grandes vene, vel arteriæ, præcisæ sunt. Vix autem ad Sanitatem perveniunt, quibus ulla parte pulmo, &c. aut ullum intestinum vulneratum est.* Eadem alibi lethalia pronunciat. *lib. sc. 7. cap. 16.* Si tenuius. *intestinum perforatum est, nihil profici posse jom retuli Latius in-*
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