

SIR THOMAS BROWNE AND THE DISEASE CALLED THE MORGELLONS

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IN "A Letter to a Friend"¹ there is a short passage of especial interest to a pediatrician, not only because of the information it yields on Sir Thomas Browne's own interests in medicine, but also because of the condition described. The single reference he gives, however, "See Picotus de Rheumatismo," is both inadequate and strangely misleading, and the condition referred to now so obscure that further comment would appear justifiable, the more so that no less a person than Greenhill² himself has confessed his inability to throw any light on this passage whatsoever.

For another reason this passage is also of interest. It constitutes one of the very few references that Sir Thomas Browne makes to his stay as a student at Montpellier in Languedoc, possibly, with the exception of his reference to the speech of that country in his tract "Of Languages,"³ the only one. Yet this must have been for him a most memorable journey, during which, as Wilkin⁴ remarks "it is impossible to suppose that he travelled without observing, or that he observed without recording."

Gosse⁵ is of the opinion that he sailed in 1630 directly to La Rochelle, and from there went on to Montpellier, arriving there about October, when the courses in Medicine began. The siege of La Rochelle⁶ had ended then a bare two years before he landed, and had it not been for the edict of the king, the roads through Languedoc might well have proved impassable; for the king and Riche-

lieu had with their army harried the land, defeated Rohan, and so aggravated the plague, then prevalent, that all commerce ceased, and the inhabitants of towns, in order to isolate themselves, obstructed the roads.

Despite these measures the plague spread so that the king, having on the 14th of July, 1629, declared a peace at Nimes, hastened North, both because of it, and of the heat which had become intolerable. In 1629, 2000 died of the plague at Montpellier, 5500 at Montauban, and in 1630-31 50,000 at Toulouse.⁷

The arrival of Thomas Browne at Montpellier coincided then closely with the sudden desperate illness of the king at Lyons, Richelieu's extreme jeopardy, and the subsequent recovery of the king, following the rupture of a peri-anal abscess on October the 2nd.⁸ His sojourn at the college, where Lazare Rivière had been one of the professors since 1622, and Ranchin⁹ was chancellor, and engaged in rebuilding and embellishing it at his own expense, must have been enlivened by reports of the struggle that Languedoc was having with the king to retain her own fiscal autonomy; by rumors of Gaston, the king's brother; of Montmorency, and of the impending rebellion.

It is therefore eloquent of the man and his interests, and also perhaps remarkable, that writing over forty years later, he should refer to none of these things, but should recall that

Hairs which have most amused me have not been in the face or head, but on

the Back, and not in Men but Children, as I long ago observed in that endemial Distemper of little Children in Langu-

It is, moreover, doubtful whether Sir Thomas Browne ever owned this book. In 1711 his Library, together

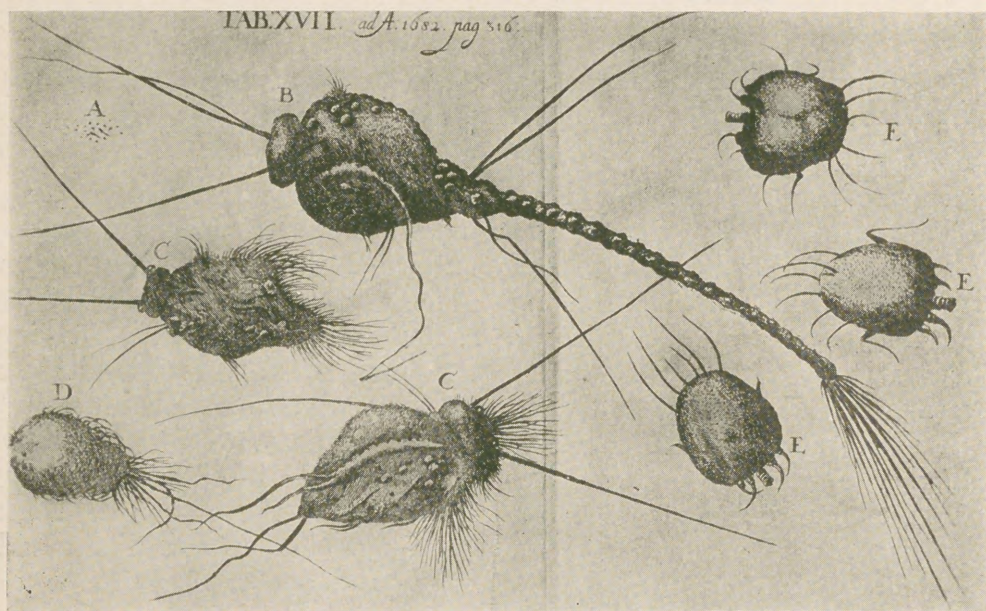


FIG. 1.

dock, called the Morgellons, wherein they critically break out with harsh Hairs on their Backs, which takes off the unquiet symptoms of the Disease, and delivers them from Coughs and Convulsions.”

and that the single reference he gives—see Picotus de Rheumatismo—should be not only vague, as are indeed all his references, to a degree unusual at that period, but also misleading.

The book to which reference is made is almost certainly that written by Petrus Pichotus, a physician of Bordeaux. This was published in duodecimo by Millangium of Bordeaux in 1577, and does not appear to have undergone a second edition. This book is now rare; there is no mention of it in the Surgeon General's Catalogue, nor in the Bibliotheca Osleriana; on the other hand, the British Museum, and the Library of Christ Church, Oxford, both have a copy.

with that of his son, Edward, was sold by Thomas Ballard in London. Two copies only of the sale catalogue appear to have survived. One was given to Osler by Sieveking¹⁰ and the other is in the British Museum. This catalogue, which enumerates rather under 2500 volumes, of which some 420 were, as Letts¹¹ points out, published after 1682, and so must have been purchased by Edward Browne, constitutes our main source of information as to the books Sir Thomas Browne owned. For it is a reasonable surmise, and one generally received, that the vast majority of the older books were his. In this catalogue, in which some 500 medical books appear, there is no mention of Pichot's book "De rheumatismo." This is not unimportant, and may explain why Sir Thomas Browne failed in so signal a manner to verify this reference, for in this book, even though on pages 18–24 there is ample opportunity for so doing, no

note, as Greenhill² has pointed out, is made of the Morgellons, nor could I discover (in this book) any reference, however vague, to the condition. On the other hand, in the catalogue of Browne's Library are mentioned several much more accessible books of the period in which this condition is, I believe, clearly described, and, in the case of Schenckius, most adequately discussed.

Before, however, examining these, and the disease called by Browne "The Morgellons," there is a further point which arises from a consideration of the books in his possession. This, though based on no more than a surmise, may, if accepted, not only explain how it was Sir Thomas Browne should have chosen to recall this condition he had encountered in his student days, but also serve to fix the year, always conjectural, in which he wrote "A Letter to a Friend."

The first monograph devoted to the condition he calls the Morgellons was that of Velshius,¹² and was entitled "De vermiculis capillaribus infantium." This formed the second part of a book which was published in quarto by Goebelius at Augsburg in 1674. The first part of this book, which was also by Velshius, was an "Exercitatio de vena medinensi." Both works are exhaustive and learned. Now the booksellers¹³ of Sir Thomas Browne, William Oliver and George Rose, were in the habit of sending him books "to vewe" as soon as they were published. He had presumably already purchased from one of them, Velshius' recondite book "De aegagropilis," which appeared in 1660, and is catalogued in his Library. It is, therefore, very probable indeed that he received a notice of this book, or actually viewed it, the year of its

publication. Should this be so, then the reference made in "A Letter to a Friend," a few lines further on, to Duloir's Travels,¹⁴ which were published in 1654, as being "scarce twenty years ago," is one that may admit of a literal interpretation, and the "Letter" dated not 1672, as Greenhill¹⁵ suggested, but almost certainly towards the end of 1674. It is possible, then, that this was not simply a haphazard recollection, and that Browne had good reason for believing this disease, so whimsical and fantastic, was one that would shortly awaken general interest.

The edition of Schenckius' "Observat. medicae raræ," that is recorded in Ballard's catalogue, is of Frankfort, 1610, and in view of the many subsequent editions, must almost certainly have belonged to Sir Thomas Browne. Schenckius, having discussed the Dracunculus, known to the Arabians, in his VII Observation, Lib. v, in the VIIIth deals with

. . . Worms or, as others will have it, Hairs, which are wont to infest the muscles of the arms, calves, and back in infants and children, and which are unknown to the old authorities . . .

and prefaces his own description of the condition with that given by Kufner in his appendix to the book on Diseases of Infants, written by Leonellus Faventinus de Victoriis.¹⁶ This runs as follows:

There exists in little children certain living principles having the appearance of worms, that are called by the common folk Dracontia. They settle especially in the muscular parts of the body, to wit the arms and legs—the calves especially. Occasionally they even congregate in the flanks under the skin, and sometimes occupy the whole of the back, or failing that

at least the inter-scapular region. These little creatures have this property that, unless they are extirpated by the appropriate remedies, they lead either to a hurtful suppuration, or else forthwith cause the child to waste. We destroy worms of this type, that are in the habit of lurking in the pores of infants and little girls, with this cure. Should they fail to become more prominent, that is should they, having applied warm fomentations and smeared on an edulcent (such as Melicraton) and spice, not thrust out their heads, then they must be positively shaken into coming out into the open. Take as much of the root of the wild vine, or of the white vine, as may be pressed into one hand: Boil this in a lye made from properly mixed oak charcoal. With this the whole body of the child, and at the same time the worms, should be sprinkled and washed. Having done this the mouths of the *Dracontia* which will have advanced forward are to be shaved off with a razor. When these have been beheaded in this manner, the child should be cleansed afresh from the aforesaid lotion by bathing in castor oil, and should then be washed and the exposed, and possibly cut, skin smeared all over with Syrian salve.

This book of Faventinus, together with the appendix of Kufner, was first published in 1544, and it is probable that this constitutes the first description of this condition. Yet George Kufner junior, who probably deserved Still's¹⁷ rather caustic comments, is almost alone in confusing this condition with the *Dracunculus* described by the Arabs, and does not appear to have realized this priority of his.

Schenckius then inserts his own description of this disease:

There is a type of intercutaneous worm which is wont very frequently to infest infants under six months and not infrequently also children of two years or of about that age. They are born, in prefer-

ence to all other places, in the muscles of the arms, legs and back, and arise from an excrementory humour which is contained within the pores of the body, and is common at that age. This, because of the repression of transpiration and dispersal, undergoes putrefactive changes and becomes alive and, in proportion to the number of receptacles of the pores, is converted into worms, which have a shape not at all unlike those that are born in putrefying cheese, but very much smaller. They never creep entirely out from the pores, but protrude their little heads, which are distinguished as so many black points. How should they not then be most troublesome, for by exciting a sensation of extreme warmth and, at the same time, of itching, they bring in their train insomnia and restlessness. Where they are packed together in large quantities and are increasing, there they plunder away from the living flesh, in the same way as do pediculi, the nourishing humours, taking for themselves that which should have been for tender bodies. Because of this little children pass rapidly into wasting and extreme emaciation. As soon as the women become aware of this, they bring them to the sweating chambers and turkish baths. They first soothingly massage the muscles and affected parts with the hand, and then also anoint them all over with honey. By this device the worms are enticed out as far as possible and so killed. The further prescription of the surgeons that their protruding heads should then be mown down with a razor is not, however, followed by our people so much as it deserves. Our German people refer to these as *Mitesser* and *die zehrende Wurm* [*sic*], from the fact that they seize for themselves and consume the food of the infants whom they infect. The Norumbergians call them *die durzemaden* [*sic*] or, as you might put it, the worms that induce wasting.

This description by Schenckius is followed by a series of four further extracts from other authors who treat

of this condition. Two of these, at any rate, appear to merit further mention. The first of these extracts is from the book written by Montuus, who is this briefly dismissed by Astruc:¹⁹

Medicin de Lyon, Docteur de Montpellier, a composé quelques petits traités de Medicine, qu'on ne lit plus depuis longtems. Ducange dit qu'il fut premier Medicin du Roi François II, & c'est tout ce que J'en scais.

In 1558²⁰ he published a book "Halosis februm" the third part of which deals "De infantium febris. . . ." and contains the following account of this condition, which Still²¹ has translated as follows: It is rather remarkable that he, an inhabitant of Languedoc, should have been content with but a second hand report of this malady, which he regards as "A new affection of infants," but which he was not the first, as we have already seen, to describe.

There is also another infantile affection, as a result of which children constantly cry and scream without apparent cause: epilepsy eventually supervenes in these cases, and in a large proportion ends in death. The common name for this is "the hair affection" (pilaris affectio); for this reason that by the protrusion and evulsion of hairs some cases are saved: and after this manner: the shoulders and neck are rubbed with the hand either dry or smeared from the milk-pail, i.e. with milk still warm from the milking-pail; the parts which are rubbed soon become rough with hairs which are clearly seen springing out like a growing beard. Then by means of bacon rind rubbed over the hairs or by a forceps every single hair is plucked out and forthwith they are cured. So I gathered from the account of a certain noble matron, who stated that in the year 1544 she saw several infants who died of this illness, and some who were saved by the afore-

mentioned treatment. Very closely analogous to this is what is said to be the case in pigs, for Didymus says that they are known to be out of health by hairs plucked out of the neck; and if their tonsils are diseased, they are cured by the plucking out of these same hairs.

The above-mentioned affection, so far as I can judge, is a fore-runner of epilepsy, where this is not a primary cerebral disturbance nor of reflex gastric origin (sympathia ventriculi) but by reflex from some posterior part in relation to the back. The so-to-speak sooty excretion (which is the material out of which hairs are formed) pass thence via the nervous structures right up to the brain, unless it is forced back by rubbings, and issuing forth through the pores of the skin which have been rendered more permeable by dry friction, is turned into hairs. Hence it is not difficult to see that rubbings without oily material, which blocks the pores, would be the more helpful.

The second description is by Ambroise Paré²² who, during his prolonged stay in Bayonne²³ with the King in 1564 may well have come into personal contact with the condition, though while both Montuus and Guillemeau, as well as Sir Thomas Browne, stress the frequency of this condition in Languedoc, he does not do so. He writes:

The mention of the Dracunculi, calls to my memory another kind of Abscess, altogether as rare. This our Frenchmen name Cridones, I think a Crinibus, i.e. from hairs: it chiefly troubles children and pricks their back like thorns. They toss up and down being not able to take any rest. This disease ariseth from small hairs which are scarce of a pins length, but those thick and strong. It is cured with a fomentation of water more than warm, after which you must presently apply an ointment made of honey and wheaten flowers; for so these hairs lying under the skin are allured and drawn

forth; and being thus drawn, they must be plucked out with small mullets. I imagine this kind of disease was not known to the ancient physicians.

The other two authorities quoted by Schenckius do not add materially to our knowledge of this condition.

The account, however, given elsewhere by Guillemeau²⁴ is of considerable interest since, in certain respects, it resembles so closely that given by Sir Thomas Browne.

This appears as the last chapter of a book published in France in 1609, and printed in London for A. Hatfield, in 1612. His account runs as follows:

Chapter xxxix. Of the breeding and coming forth of Haires on children's backs and raines, called in Languedocke Masquelon, and of the Latines Morbus pilaris.

It had beene more agreeable and convenient to have set down this disease in the Chapter of the Unquietnesse and Crying of little Children. But as this book was even almost printed, M. Toignet, a Barber Chirurgion of Paris put me in mind of this disease that happens unto little children, which is verie common in Languedocke and is called in their language Masquelon. Having inquired of divers physicians about this disease and among the rest of Mons. Riollan, Doctor of Physicke in Paris, and the King's Professor of Chirurgery, a verie learned and painefull gentleman, he told me that Montanus had written of it and that he called it Pilaris affectio.

As soone as little Children are taken with this disease they crie and take on extremely and yet one cannot perceive any cause, why they should do so, which brings them oftentimes even to their grave, for this disease drawes along with it Epylepticall convulsions: because the sinewes which come forth of the backebone and are scattered on each side are overburdened and filled with some fuliginous vapour, of which Haires are bred,

and they by their great length and continuity are carried directlie to the braine; whither when they are come, they cause this disease. The Women of the countie of Languedocke, because it is a common disease with them, make no great reckoning of it and doe help it in this manner. With the palme of their hand they do rub the bottome of the childs backe and reines downe to the crupper-bone so long till they feele through the pores of the skinne the tops of very stiffe and pricking haire to come forth like unto hoggs bristles, which as soone as they see that they are come foorth, they pull them away by and by with their nayles, or else with such little Pincers as women use to pull the haire from off their eyebrowes. The same Montanus counselleth the woman to rub her hand first with some new milke; which being done and the haire pulled away, the child presently recovers his health and leaveth his ordinarie cries and laments.

Though this book ran through two editions in England and several of the early books on Pediatrics are in Sir Thomas Browne's Library such as Austrius,²⁵ Omnibonus Ferrarius,²⁶ and Hucher,²⁷ he does not appear to have had it. He may well not have known of its existence, or else have preferred to ignore it. For Patin, who had from time to time praised the "Religio Medici" and its author, appears particularly to have disliked Guillemeau as a pushing fellow, as a "rusé courtisan qui avoit grande envie de faire fortune,"²⁸ and Sir Thomas Browne had for Patin a great respect.

Whether or not he was aware of Schenckius or of Guillemeau's contributions, certain it is that Sir Thomas Browne shares fully in the reluctance common to all compilers to refer to other compilations. Conrad Gesner's²⁹ works were in his library, in Nordenskiöld's³⁰ opinion "one of

the greatest biological works the world has seen," and yet he scarcely refers to them at all. The great majority, if not all of the volumes of Aldrovandus³¹ great encyclopedia on natural history were also his, and Gosse³² believes that it "is the barest justice to say that Browne could not have carried out his ingenious labours without his aid." Yet Browne, when he does occasionally refer to him, as in the paragraph on the Musick of the Swans,³³ refers to him in his capacity of an original and renowned ornithologist, and not as a compiler to whose labors he must have been greatly indebted. Nor is it unreasonable to feel that a reference to Schenckius, one of the most popular books of the period, would have served largely to have reduced a glamorous and, on the face of it, fantastic recollection, to the mere commonplace, a disadvantage that Sir Thomas Browne would have been the first to appreciate.

There were other books, however, in his library to which he might have referred, even though, oddly enough, none of these are books referred to by Schenckius. Two of the four works by Montuus are in the Library, the "De activa medicinae scientia,"³⁴ and the "Anasceves morborum,"³⁵ but not the "Halosis februm" in which he describes the condition, while Ambroise Paré is not represented at all in a Library which it is perhaps interesting to note here, since Ballard's catalogue is so inaccessible, contained the surgeries of Guy du Chauliac (1585), and Hildanus Fabricius (1646) and Fabricius Acquapendente (1619), as well as his Anatomy, and those of Vesalius (1555), Spigelius (1627), Columbus (1559), Aselli (1628), Fallopius (1600), Bartholinus (1651), High-

more (1651), Glisson (1677), Willis (1664) and Wharton (1656); and in Medicine, in addition to Foesius' Hippocrates (1624) and Cornarius' Galen (1549), such standard words as those of Sennert (1650), Lusitanus (1649), Riolanus (1610), Forestus (1634), Rivière (1653), Cardanus (1663), Baccius' "de Thermis" (1622), the "letters" of Manardus (1542), and the "Quaestiones Medico-legales" of Zacchias (1661), together with Glisson's, "De rachidite" (1650) and Harvey's, "De generatione" (1651) and "De motu cordis," (1648) both of which, strangely enough, are only mentioned in the addenda to the catalogue. Hucher's book he had, however, and Still has pointed out that this contained a brief mention of the condition.²⁷

He might well have thought of this author in this connection, for he was one of the great chancellors of Montpellier, and Ranchin, who had at his own expense rebuilt the amphitheatre college in 1620, had caused the following inscription, which Browne would surely have noticed, to be put up in his honor on the face of the Medical School Buildings:³⁶

D.M.

Joannis HUCHERII Bellovacii, sallutis publicae Conservatoris, Professoris regii & Cancellarii qui postquam coelum nostrum medicum dignissime, diu sustenavit Atlas, defunctus est in hoc Montepelio. Ann. D.M.DC. IIII.

Furthermore, he was an author after Browne's own heart, and deeply interested in witchcraft, over a hundred pages in this book being devoted to occult causes of sterility "seu de maleficiis."

This reference to the condition is, however, very brief, and far more

helpful would have been Borelli,³⁷ whose "Observationes medicae rarae" he had in the Paris edition of 1656, for his account has the rare virtue of being at first hand, and his nomenclature the merit of yielding a clue to the etymology both of the Morgellons and the Masquelons, from which I believe the Morgellons is derived.

This observation is the 80th in the first book, and is entitled "Vermes in dorso—Masclous dicti."

Now Masclous is, as might be anticipated, pure provençal, is apparently a term still employed, and is defined by Mistral³⁸ in his dictionary as meaning "cirons, insectes qui s'engendent entre cuir et chair." Masclous is derived by him from Mouscloun, which is in turn a contraction of mouscoulo, or mouscouloun, of which there are many alternative spellings, such as mascoulo, mescoulo, mous-clouroun, and mescouloun; from one of these came probably Guillemeau's masquelons and Sir Thomas Browne's morgellons. Mouscouloun itself means the hook which is attached to the end of a spindle, and is derived from the Latin *Muscula*, a little fly, a root which has appropriately enough given many words to Provence. Borelli's description, somewhat abridged, runs as follows:

As in the human face, especially the nose, so almost throughout the whole body lurk little worms with black heads, giving rise to itching . . . so also children have worms in the back like hairs, by which they may be so tortured that they can neither sleep nor take their milk, but on the other hand do not cease from harassing their mothers with their incessant screaming. This condition I saw with my own eyes in my brother, but following an injunction with honey, within a few

days the worms came away from the back. . . .

The subsequent history of this condition is not without interest. In 1682 Ettmuller³⁹ published in the "Acta eruditorum" a couple of observations, the first "De crinonibus seu comedonibus infantum," the second "De sironibus." In the first observation not only is the condition once more described, and its recent origin stressed, but Ettmuller claimed to have settled once and for all the much debated question as to whether the "hairs" were living or not, by microscopical examination.

His figures of the parasite are reproduced in Figure 1. A shows the parasite under the naked eye; B, C, D, under the microscope, B alone being a perfect specimen. E, E are figures of the Cirones or sarcoptes hominis, which he describes in his second observation.

Though much doubt was subsequently to be attached to the accuracy of his first observation, the second at any rate appears to be sufficiently accurate to justify Ettmuller claiming some degree of priority over Redi,⁴⁰ whom Brumpt⁴¹ gives as having been the first to describe this parasite in 1687.

Andrey,⁴² twelve years later, reproduced Ettmuller's diagram in his monograph on the generation of worms and, while in no way casting doubt on their existence, contented himself with an epitome, in the main of the accounts I have already given. But, though his book is most aptly prefaced by a quotation from Job, Chapter VIII, v. 5, and despite such authority, the vogue of worms as an aetiological factor, which had equalled the more recent vogue of the

schizomycetes in a similar rôle, was waning, and in a few years was to receive, on the publication of Le Clerc's "History of Worms" in 1715 a blow from which it never seems really to have recovered.

Le Clerc⁴³ treats the morgellons in a most cavalier fashion. He writes:

From the fountain of Error indicated in the second place to wit from things inanimate, are also bred a certain species of Worms which are cutaneous and called Cridones or Crinones, if they are only Hairs, as Leuwenhoeck will have it. . . . Leuwenhoeck, we find hath swept away the Crinones of Etmuller and others from the Number of Animals. Etmuller indeed challenges us to the Test of Experience, and affirms by the Assistance of the Microscope he had seen those Crinous, that is, true Worms; but since Leuwenhoeck by using the same Instrument did not discern them to be little Worms, but Hairs or Bundles of Hairs, and an inanimate Matter, it remains that we make a Judgment to ourselves which of the two we will believe, and which not. But if we enquire whether of them understood the Art of managing the Microscope best, or used it most frequently, no Body, I am of Opinion, will prefer Etmuller to Leuwenhoeck, who was the most eminent that Way of his Age; so that if either err'd, it is most probable 'twas Etmuller. But those who use these Glasses with the most Success, can decide this Controversy best; and if there are any Children afflicted with this Disease, they fall into their Hands, for I never saw any, nor any Physicians of my Acquaintance.

But whether or not Leuwenhoeck's⁴⁴ observations refer to the same condition is rather a matter for conjecture and, to say the least, doubtful. Nevertheless, the Morgellons had apparently suffered a complete and rather ignominious eclipse when, on the 22nd of October, 1776, M. Bassignot,⁴⁵ Phy-

sician of the Town of Seyne in Provence, read a paper with the following title to the Société Royale de Medecine: "Histoire de la maladie connue sous le nom de Crinons, qui attaque les nouveaux nés a Seyne en Provence," and which, with several rather considerable omissions, reads in English as follows:

Seyne, Sedena, a little town in Haute-Provence, in the diocese of Embrun, is the seat of a strange malady, which attacks nearly all the newly born. Writers mention it under the name of crinons, or comedones, and it is, known in the district under that, of ceès, which is a corrupt form of ceddès, a Provencal term meaning bristles. The malady becomes manifest during the first twelve hours or on the day following birth, sometimes during the first 15 days, or even a month after birth. . . . The symptoms by which it is recognized are a very considerable degree of itchiness, which is augmented by the warmth of the bed, and which prevents children from sleeping; incessant restlessness; complete inability to suck, the tongue being unable to fold on itself and grasp the nipple; and finally the impaired sound of the child's cries, which either become hoarse, or else nearly die out. This last sign seems indeed, to be the most significant, and the severity of the malady may be estimated from the degree of loss of voice, and from the weakness of the child's cries.

As soon as the presence of crinons is convincingly demonstrated by the signs we have just discussed, the cure is proceeded to. This consists in frictions which are done by the women of the district who are so used to recognizing and treating this condition that as a rule they call in neither physician nor surgeon. . . . I am unable to determine accurately the extent of the country in which the malady has established itself; the enquiries that I have made suggest that few of the newly born are attacked by it at Digne, Sis-

teron, Gap and Embrun, but that the disease is more frequently encountered at Barcelonette.

Nor was this a unique and final mention of this condition. Within a further thirteen years, J. G. Wolf⁴⁶ wrote a thesis on the comedones for his M.D. at Leipsig which, though guarded in the extreme, received such a review in the *Journal de Medecine* for 1791⁴⁷ that the Morgellons might well consider their position to be once more impregnable:

With the help of the microscope these cinder-coloured animals may be made out, having two horns, round eyes, a tail which is long, forked, with the extremities, which are bent up, covered with hair. These worms are terrible to look at.

Bruguières⁴⁸ had occasion to study a case personally, and believed that the little hairs which were elicited on rubbing the child were capable of independent movement. He mentioned that the condition was known in Provence as Masclous. Laënnec,⁴⁹ however, writing shortly afterwards, considered that the parasitic nature of the disease was not yet proved, and going a step further suggested that the little hairs, the so-called crinons, "ne sont autre chose que la matière onctueuse qui enduit la surface de la peau, et qui s'en détache sous la forme de vermisseaux chez tous les hommes par l'effet des frictions faites avec la main."

In 1843 Simon⁵⁰ described the *Demodex folliculorum*, a common inhabitant of comedones, which may well have been the parasite seen by Etmuller, as was apparently suggested by Schönlein⁵¹ some years ago.

Then again there appears to have

been a further lull in the interest taken in this condition: significantly enough, when the condition is once more described, it is in England, in London in the eighteen eighties, at a time of considerable industrial depression and squalor, and it is referred to once more as a new condition.

In April, 1884, Radcliffe Crocker⁵² published a series of cases designed to "illustrate a condition which is not generally recognized as a disease of childhood, as the text books only describe comedones as they occur at puberty and onwards, from which this condition differs in several particulars." It is to be noted that the majority of his cases were in boys between the age of three and twelve, and the comedones were, as a rule, localized to the head.

The position in most of the boys corresponded with the part where their caps were in closest contact with the skin; naturally suggesting that they had some causative connection; and, on comparison with the cases where other regions were affected, the common factor was found to be warmth and moisture. This was confirmed by a recent case of a girl of three years old with laryngeal obstruction, probably diphtheritic where, after repeated linseed poultices she presented—when I saw her—scattered comedones with acne and pustules all over the back and lower part of the chest.

. . . Comedones in children differ from those in adults in their being mainly dependent on local causes, on their greater tendency to group and to be more closely set, in their involving the hairy scalp, and finally to their being generally readily amenable to treatment, all that is usually required being friction with a weak soft soap and spirit liniment, or a weak, sulphur application may be employed in mild cases, preceded by fomentation with very hot water.

The subsequent writers⁵³⁻⁵⁸ of this period do not really add further to our knowledge of this condition. Julius Caesar emphasizes once more the novelty of the condition: "a rare and hitherto unrecognized affection in children," and the district from which he writes suggests poverty as constituting an important factor in this condition. Cases of MacLeod and Dore, in which the distribution coincided with the areas rubbed with camphorated oil, further illustrate another factor mentioned by Crocker, and the emphasis placed by Harries on the rôle played by the familiar Lancashire shawl in his cases is paralleled by Crocker's observations on the relationship of the comedones to the caps the boys wore.

The case published by Cauty at an earlier date as "A Bristley Boy" strikingly illustrates the aptness of the name of the condition both in Narbonne, where "they were called the Soyés, that is the bristles" and in Haute-Provence.

Whether or not the condition described by Crocker is identical with that known by Sir Thomas Browne as the morgellons, can only be a matter for conjecture: it is possible that Etmuller was less grossly inaccurate in his drawing than is supposed, and that the illness represented an invasion of man by a type of demodex, not now generally known; but this is not, I think, probable.

If, however, the condition described by Crocker is the same as that mentioned by Sir Thomas Browne, it would appear necessary to advance some explanation both for the difference in the age of onset, and in the localization of the comedones. These differences are, however, I believe, in the main superficial, and probably

represent no more than an expression of the greater intensity in Browne's time of the very factors mentioned by Crocker. The localization of the morgellons, which was not confined to the first few weeks in infancy, being dependent on the method of swathing the child then in vogue, the great prevalence of the malady upon the extreme poverty of the people at that time.

While Glisson,⁵⁹ with a certain amount of satisfaction, adequately describes how

. . . the midwives and nurses do handle them so artificially when they are new born. . . . They enwrap the whole Body, excepting the Head, in one continual Covering; whereupon the exterior and first affected parts of the Body in this Disease are fortified against the injuries of the outward cold, and the hot exhalations breaking out from any part of the Body are duly and equally retained by reason of that covering which is two or three times double, and bound about with swathing Bands, and equally communicated to all parts of the Body so that they are cherished with an even heat as it were in a common Hypocaust or hot House . . .

The poverty and utter misery of the French people at that time has perhaps been most eloquently portrayed by Michelet.⁶⁰ He, moreover, and I believe rightly, saw in the outbreak of witchcraft during this period, an expression of the utter distress of the people:

Pendant que la terre devient stérile et que la subsistence va toujours tarissant, l'homme aussi veut être stérile. . . .

C'est là, en réalité, la cause principale qui étend si prodigieusement l'action des sorcières en ce siècle. Les vivres ont enchéri horriblement, et la rente pèse infiniment plus qu'aux temps féodaux. On ne peut plus nourrir d'enfants. . . .

Le paysan se donne au Diable. Et la paysanne encore plus. Écrasée de grossesses d'enfants qui ne naissaient que pour mourir, elle portait, plus que l'homme encore, le grand poids de la misère. J'ai dit au quinzième siècle le triste cri qui lui échappait dans l'amour: "Le fruit en soit au Diable." Et que lui servait, en effet, de faire des morts? ou, s'ils vivaient, d'élever pour le seigneur un misérable, un maladif, qui maudirait la vie et mourrait de faim à quarante ans? Lorsque la femme disait cela vers 1500, on vivait pour deux sous par jour. Combien plus le dira-t-elle en 1600, ou on ne vivait plus avec vingt sous! La mort devient un voeu dans cette misère.

It is, I think, significant that the distribution of this malady should, in the main, coincide with those areas where this superstition prevailed at that time the most, and fitting that the etiology of both should have resided in factors with which Sir Thomas Browne should, perhaps to a greater extent than any of his contemporaries, have been so unconcerned.

SUMMARY

Attention has been called to a passage in "A Letter to a Friend" in which Sir Thomas Browne refers to a condition, which is of interest to a pediatrician, but the nature of which has apparently hitherto remained obscure.

It is suggested that the disease called by him the Morgellons is a disease that caused considerable interest in the seventeenth and eighteenth centuries, known under a variety of names such as Les Crinons, Masclous, Masquelons, from which it is suggested the name Morgellons is derived.

The nature of the malady is described, and a brief account given of its history. A further suggestion is ten-

tatively put forward enabling a date to be advanced for the writing of "A Letter to a Friend."

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