

ART. XI. – *The Dissemination of Medical Thought in the 17th Century – A Case of Rickets in Westmorland.*

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THE le Fleming mss. in the Kendal Office of Cumbria County Record Office contain some hitherto unpublished material which sheds interesting light on the medical knowledge available to a family of the substantial gentry in a rural area in the late seventeenth century. The head of the family at this time was Daniel, later Sir Daniel, Fleming who fortunately practised meticulous note-keeping, filed his letters and maintained elaborate accounts of his expenditure. Among his letters are several about a case of rickets in the family, which is further documented by entries in his account book and a family commonplace book. A comparison of the letters with contemporary printed works shows that the gentry of the rural north had access, through their medical advisers, to the most modern medical thought.

The Flemings were a healthy family in general. Sir Daniel and his wife had fifteen children, but she died of the fifteenth, in 1675. Of these children only one, John, aged three, died before his mother. Thomas, the child who had the rickets, died after her, also at the age of three. For thirteen out of fifteen children to survive infancy was unusual in this period and suggests the family had sound constitutions and a healthy mode of living.

Thomas Fleming was born about 4 October 1673, when Sir Daniel's account book shows a payment of 10s. to Ann Rigg, the midwife.¹ He was baptized on 21 October, but may have been delicate at birth, since it was found necessary to employ an extra woman in the household for a few weeks after the birth. The account book records a payment to this woman of £1 on 3 November. Thomas, like most of his brothers and sisters, had a wet nurse, a Mrs Hall, who was paid off with £3 10s. exactly a year later.

It is not clear how soon after Thomas was weaned that it became evident he was ill, but the first letter referring to his case was written on 11 April 1677, by Thomas Braithwaite, a relative of the family who lived at Burneside Hall and was evidently already treating the case as rickets. Braithwaite seems to have acted as the family medical adviser quite frequently, although the account book records no fees to him. He was indisposed at the time of writing, and may well have visited and advised for some time previously, being now obliged to write instead. He recommended a "gentle recipe" consisting of a "sprussia, or blacke-beere is to [be] made warme in a saucer and well rubd, and chaft, with a hott hande upon the infants breast, stomacke, and spine of his back, upon which part (onely) let this emplaster be applyd, and kept on for five days and nights. Let the childe likewise take 2 spoone full of the liquor, a litle warmd, att bedtime and the same quantitie every morneinge, fastinge one hower, soe longe as itt lasts. Be pleasd first to bathe his neck and other g[riev]d parts with vinegre, warmd a litle, then to annoynte the same parts with the oyle of roses, heere sent".²

Either Braithwaite's own indisposition or the evident deterioration of the patient or both seems next to have obliged Sir Daniel to call in another doctor, and on 14 May 1677 he entered in his account book a fee of 10s. "Given to Dr Kidson for seeing of my son Thomas". The result of this visit was a letter³ headed 'Rachitis' which runs:

“Sir, It wilbe needlesse at this time to give you the trouble of describing to you the nature, causes, and signes of this sad distemper, being too playnely manifest, which may be at another convenience more fully discussed; neither will it be at present much to the purpose to reckon up the manifold prognosticks which the severall appearances of it may presage to us; onely I shall take the freedome to discourse to you some of those most commodious advantages which the sweet child’s present necessity exacts. It is an approved custome and hath beene since this disease hath been first understood, in use, in the first place to attempt the scarification of the concha or shell of the eare, which is supposed to be a meanes of freeing the springs of that nerve of the 5th payre of that torpor or binummednesse arising from the distemper of that nerve, and carrying the same by the marrow of the back distributes its sense or disorder to every part of the body, that shell & pinne or wing of the eare being the neerest part to that nerve which we may adventure to cut or scarify, which being revived & made more vigorous by stirring up new actions therein, and by reason of the dolour, which the more it is, the greater adv[an]tag[e] is expected, this nerve dispersing its branches by the marrow to every part both the thighes, legs & feet. Yet are we not to ascend to this course unlesse we despayre of the efficacy of other helps. The like but not so much effect is ordinarily expected from issues made in the neck. But for leeches, & cupping with scarification & without, the one is hurtfull, the other unprofitable, unlesse some other complicated disease joynd therewith require it. Vesicatoryes are sometimes proper in the neck or behind the eares, but because in young children it robs you of their ease & liking to dilight & play, it may prove also inconvenient. Clysters also in way of preparation are much, often, commended, but being uselesse in this condition I omitt them, as also vomitings, which in those that are strong & but lately affected may prove usefull & good preparatives, but heere we cannot use them. That which I would commend at present should be such as these, that in their whole substance contradispose the whole temper of the body to resist the disease, which is 1. Laxitas & mollities partium. 2. Debilitas et languor. 3. Ignavia at torpor, que statim ab initio morbi artus invadit. Sensimque, augetur, ut magis magisque indic[atione]s omnem motam aversentur. Alogotrophia⁴ seu inaequalis nutritio partium. Atrophia,⁴ extenuatio, macies, protruberantiae, articulorum et in costarum extremitatibus ossium incurvationes. Appetitus cibi et potus justo debilior &c. To which purpose are⁵ . . . Apozema de quo bibat puellus haustum mane et hor 4ta pomeridiana valet potissimum, ubi pertinaces obstructions in mesenterio hepate &c. adsunt. Extrinsicus applicanda. The same or like materialls may be used by outward applic[ation] and are either liquores which have beene long approved by constant use, as all sorts of rich wines, especially muscadell. Others commend before wines cervisiam gedauruse or prussiack beere, such as you have already used, which are indeed proper for consolidating & confirming the parts, but of no advantage at all for aequating the distribution of the blood & nourishment. The same may be said of alicant wine and red wine. Some hold aqua vite of the common sort or brandy, which is holden to be nothing short of the best wine wherewith such a liquor is made⁵ . . . Let these or such as I left be spread upon thin leather and applyed to the back & loynes & to the region of the spleene. But for that grand weaknesse of the breast & stomach, use de betonica to which is added to 3 ounces mastich and olibanum, each halfe a drachme, & 2 ounces of emplastrum de crusta paris. But to the region of the belly, especially where the hypochondria or poynts of the short ribs are strecht & hard, or puft up, you may use these applications⁵ . . . Also let the nurse handle the childs belly, thrusting, rubbing, putting her fingers’ ends under the ribs, as much as she may commodiously, and with her hand dipt in the oyntment use much constrictation & chafing of all those parts, thrusting the entrailes upwards, downwards, to the right & left sides. Balsam de tolu is also excellent, used with such oyntments as are appoynted for the brest, or balsam of Peru, which conduce to help the palpitation of the heart & shortnesse of breathing as this next is . . . Many things more might be added; but for the strumes in his throat & neck, because it is a chronicall disease, & requires not such speedy meanes, neither is the child’s body able at present to beare sufficient medicines for that purpose, I willingly omitt them & desire earnestly a blessing for recovery of that sweet child, & with hearty thanks for your great respects, I rest, Your worships much obliged, Henr. Kidson.”

Although Dr Kidson does not say so, his summary of the clinical signs of rickets and his methods of treatment are those of Francis Glisson, whose famous work *De rachitide* appeared in Latin in 1650 and in English the following year. In actual fact the first book published on rickets was not Glisson's but a doctoral dissertation given at Leyden University in 1645 by Daniel Whistler, entitled *De morbo puerili Anglorum, quem indigenae vocant the Rickets*. This book is very rare however and seems to have been totally eclipsed by Glisson's work. Whether there was some connection between the two is not certain, but most of the material found in Whistler's thesis is also to be found in Glisson's longer book, although the authors differ in certain points. For example, both attribute the bony deformity in rickets to unequal nourishment, or 'alogotrophy', of the parts, but whereas Glisson denies that there is any defect in the vigour of the heart, and blames this inequality on the unfitness of the smaller arteries for transmitting the blood (p. 29), Whistler (thesis VI) thinks that coldness of the heart and lack of vital force, with resultant poor circulation, produces the obstructions of the liver and other organs which both authors, followed by Dr Kidson, describe as symptomatic of rickets. Incidentally both authors seem to have fully integrated into their thinking Harvey's views on the circulation of the blood, published in 1628. They differ in other respects too; Whistler claims that the brain at autopsy is generally soft and watery (thesis IV) but Glisson states that he personally has frequently found the brain at autopsy to be quite normal (p. 27).

Whatever the relationship between Glisson's and Whistler's ideas it is improbable that Kidson knew of Whistler, and indeed possible that he did not know Glisson at first hand, since the latter's work had all been summarized in a more popular book by Robert Bayfield, *Enchiridion Medicum* (London 1655). Obviously Kidson, Braithwaite and indeed Sir Daniel all had enough Latin to read Latin authors but Thomas Braithwaite certainly assumed Bayfield's book was where Kidson had found his prescriptions and an examination of the book makes it seem very likely that it was indeed in this handy form Kidson had consulted the latest views on rickets. Braithwaite was evidently shown Kidson's letter, and wrote to Sir Daniel on 27 May 1677 a letter⁶ in which he seems to feel he himself had missed an opportunity to shine:

Worthy Sir . . . I have with a wistfull eye perusd learned Doctor Kiteson his scheme, and praescriptions, relative to your litle sonne his great distemper the Rachites, or Rickets . . . In shorte, I finde him soe absolute a spagyrick that he hath left me noe cranny for my dull-darke-lanthorne to give the least glimpse of light, much lesse to praescribe any recipe de novo, when he hath soe generously and ingeniously given soe numerous authentick and [ap]p[rove]d ones, even by famous and most successfull praecedinge Galenists and others. In shorte, I admire his knowledge, but am planet-struck with his justnes, for, really, to starte with his first notions of the effects of issues, leeches, cuppings, with scarification, and vesicatories, then with what he orders for resistinge the disease by herba cappillares, as trichomanes ruta nuclur. etc. Allsoe the makeinge up of the followenge colature (which my sence speakes verye proper for a childe) or the apozeme, by the knoweinge person and parson praescribd, is without dispuite highly contributory to helpe all pertinaceouss obstructions of the misentery, liver and lunges, which the litle patient stands in great want of. All his extrinsecal applications are not in the least shorte of his intrinsicall, for I can assure you they are all, verbatim, set down by Rob. Bayfeild in his Enchiridion medicum, which he culld out of the most approved authors, and treates of att large in his seconde booke, chap. 32 page 214 'Morbus spinalis vel spina dorsi'.

This I doe not write to derogate one iota (for I professe a peculiar honour is in my breast for him) from his meritts, by taxeinge him for cotypeinge others' recipes, for 'Quid dictum quod

non fuit dictum prius?', and often you knowe, good witts jumpe. But in case some critique shoold unadvisedly say 'The Doctor makes other mens elaborate tractates his owne workes', what then? Where lies the crime? May not (I appeale to your prudence) a well-intendinge physitian, as honestly steale (if I may worde itt soe), an advantageous medicine from a more applauded and approved spagyrist, to the assistance of his languishinge patient, as a devine a sermon to his zealous congregation for the indulgement of theyre soules? . . . Soe I thinke itt seasonable to treat of your childes distemper by prognosticks, or shorte aphorismes.

In the first place, if this disease be natural, or in case it invadeth before birth, itt is rarely or never cur'd. The more early the invasion is after the birth, the more dangerous. This malady proceedinge from some other foregoeing affects is more pernicious then that which is introduced by an erroneous regiment of health. The greater the head is, the harder and longer the cure. The weaker the back, the greater and more dangerous the affect. In case the hydrocephalus be complicated with the rachites it importeth great danger. An asthma, especially an orthopnoea, in this distemper is a praecursor of a shorte ensueinge death. If the ptisick be annex to this affect (which in time, if not prevented, it will change into) itt is certainly mortall. The scurvie joynd with itt much retardats the cure. All strumaticall tumors, internall or externall, doth not much suspend the possibilitie nor hopes of cure. But this is to be observd, that whosoever are not perfectly cured before they come to the first five yeares of this distemper, they live in a most miserable state, fallinge either into diseases asthmatical, chachectical, ptisical, or they growe for the most part crooked, dwarfish or deformed.

Be pleasd to take what I borrowed from the same author, and my owne experience; in case scabs, wheales, pimples, or the itch come after this affect, itt gives hopes of perfectinge and expediting the cure.

All this Doctor Kidson coolde and woolde have made knowne to you, but modestie (which he abounds with) woolde not permit him to impose soe great a troble upon soe serious, and generally concerned a person, which my confidence and reall regards to your selfe usherd mee to. To conclude, if you fancie any of what recipes are by the doctor praescribed, I coold wish you to make use of his colature, as most safe, and soonest prepard. But if itt were for a childe of my owne (and as I am a Christian, though none of the best, I woolde doe the same for yours) my advice is that you will cause nothings to be applyde (inwardly or outwardly) but what I orderd to Mrs. Bankes to praepare and administer, makeinge use of the hearbe *Tricomanes*, which in plaine English is common maiden-haire, in place of that hearbe she cannot get.

This I advise as most secure, yea, and certainly advantageous too, if I durst thinke, or even hope, a recoverye for an infant, soe much debilitated . . . Tom. Braithwaite".

The reference to "that hearbe she cannot get" suggests that Braithwaite had prescribed other medicines before Kidson was called in, apart from the prussiack beer mentioned in his letter of 11 April, probably when on a personal visit at some earlier time. The aphorisms in Braithwaite's last letter are quoted even more verbatim than Dr Kidson's prescriptions from Bayfield pp. 224-6, which in turn corresponds to Glisson pp. 251-6. It seems likely that Braithwaite had a copy of the *Enchiridion Medicum* at Burneside Hall, since he is able to give the exact reference.

Whether Kidson was also using Bayfield, or whether he used Glisson directly, he took the liberty of modifying the opinions of his authorities. Thus he rejects the use of preparative clysters and vomits as too strong in this particular case, although Bayfield recommends them (pp. 229 and 232-3); similarly he is cautious about issues, although Bayfield asserts "Many children are cured only by the means of issues" (p. 231, Glisson p. 313). The advice as to the nurse's massage of the child is however taken from Bayfield (p. 240), who also recommends Balsam of Tolu (p. 242).

It may be that the earlier prescription by Braithwaite involving the herb Mrs Bankes could not get, is one of those in a manuscript commonplace book kept by Sir Daniel's wife Barbara.⁷ The book is not in her handwriting and may have been copied up for her, or from her notes, possibly by Mrs Bankes, but is certainly of about this date. There are several remedies for rickets in this book and for "weakness in the back". One of these prescriptions runs:

"Take a pottle of ale, a spoonfull of anniseeds, 6 great leaves of hearts tongue (the red stalke in the midle being taken away) a good handfull of liverwort well pickt, two sticks of liquoras scraped & sliced, a good handfull of rasins of the sun stoned, put all these into the ale and boyle it till a pint be consumed, than strain it & sweeten it with an ounce of brown sugar candy, put it up in stone bottells, stop it close & set it in a cool place, let the child drink this and non other till it be well".

In Sir Daniel's own handwriting yet another is added at the end:

"Take Album Grecum or white dogs turd, & beat it into a fine powder, then mix it with brown sugar, & give some of it to the party to eat".

Whether any of these prescriptions was recommended by Braithwaite is impossible to tell, but although harts' tongue and maiden-hair feature in Bayfield, white dog's turd does not and is more likely a folk remedy.

However, it seems that in Braithwaite and Dr Kidson, Sir Daniel had advisers familiar with the most modern methods of treatment for rickets. The rickets letters were written in the year of Glisson's death and he in his pioneer work claimed that rickets was then "absolutly a new Disease, and never described by any of the Ancient or Modern Writers in their practical Books which are extant at this day, of the Diseases of Infants" (p. 3) and especially little known "in the Northern Counties, and scarcely yet made known among the Vulgar sort of people" (p. 4). The Fleming letters show however that within his lifetime his views had become well known to the family physicians of northern gentry. Unhappily their learning was of no avail and Sir Daniel's account book records the death of Thomas on 31 May 1677.

References and Notes

¹ The extracts from the account book quoted in this paper have been printed in J. R. Macgrath: *The Flemings in Oxford* (Oxford 1904) Vol. 1, pp. 467-84.

² WD/Ry 1857. Capitalization and punctuation have been cautiously modernized in these extracts; "ye" is rendered "the" etc. and normal contractions expanded.

³ WD/Ry 1885 b.

⁴ These words are in Greek characters in the original.

⁵ Prescriptions for an apozeme, colature, ointments etc., given in the original in Latin and using pharmaceutical symbols for quantities, have been omitted.

⁶ WD/Ry 1885.

⁷ WDY/118 unnumbered folios. I quote from this book by kind permission of the present owner, Mr C. G. Lewin, who very generously permitted the Cumbria County Record Office, Kendal to photocopy it.

