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INFLAMMATION.

BY

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ON CHANGE OF TYPE IN INFLAMMATION.

THE late Dr Alison, in his Clinical Lectures,[1] and in his several papers upon what may be called the blood-letting controversy,[2] has based his opinions as to the efficacy of blood-letting in true pneumonia chiefly upon the statement, that the pneumonia of the present day is a *pathological* term defining a disease recognised by the physical signs of inflammatory effusion, while, in Cullen's day, the same term was applied to a *nosological* disease, including not simply inflammatory effusions, but inflammatory effusions "taking place in connexion with a certain group of symptoms—pain, deranged function of the affected parts, and inflammatory fever," and, in particular, with "a *frequent, full, hard, firm, and quick* (*i.e.* sharp) pulse; that, therefore, the pneumonia of the present day would, under some other name, have been treated just as it now is, without venesection, while the pneumonia of Cullen's day, if it were to occur now, would still require precisely the same treatment as then,—that is, full and repeated bleeding continued so long as the pulse presented the above characters and the dyspnœa lasted." The opinions of a medical man so cautious, so trustworthy, and so distinguished as Alison are certainly deserving of the respectful attention of every physician; I think, indeed, that we are all at one with him in regard to his fundamental statement, and if any of us differ from him in regard to the therapeutic corollary based upon it, I believe we are able to give good reasons for that difference.

I do not, however, at present intend to enter at large upon the question of the treatment of pneumonia. I only propose laying before you a few facts as to the prevalence of typical pneumonia in the days of Cullen and Gregory, and as to the nature of the cases which were treated by large blood-lettings in their days, so that by these we may be enabled to judge of the probable amount of truth contained in Dr Alison's opinion as expressed in his therapeutic corollary.

In the library of the Edinburgh College of Physicians there are no fewer than seven[3] volumes of MS. Clinical Lectures by Cullen, extending over several years, from 1764 to 1774, and comprehending a large number (upwards of 200) cases. I have looked carefully over the whole of these to see if I could find any cases of typical

[1] Edin. Med. Jour., Aug. 1850, p. 162; and Nov. 1852, p. 495.

[2] *Op. cit.*, March 1856 and May 1857.

[3] There are nine MS. volumes lettered, "Clinical Lectures," one of them is, however, a volume of Lectures on Practice of Physic, and another is a duplicate.

pneumonia or pleurisy, but I have been unable to find one single case; and this is so far satisfactory, as showing that typical pneumonia was quite as rare a disease in Cullen's day as it is now, and it also confirmed Dr Home, senior's, statement, quoted by Alison, that "true pleurisy (or pneumonia) is a very rare disease here."[1] Most of the cases recorded are precisely such as we find in hospital now-a-days, only there are a good many cases of intermittent fever, and of course a considerable—but no ways remarkable—number of cases of inflammatory fever and catarrh; and among them, though the frequency of the pulse is rarely mentioned, and is very often stated to be soft and not always full, sometimes indeed under 100, yet none escape the inevitable blooding on two or three days successively after admission, even though that is repeatedly stated to have been upon the ninth or tenth day. Now and then, too, Cullen naïvely congratulates himself upon the case not having turned out nervous fever; in which case he adds, "*the blooding would have been pernicious.*" As a sample of his treatment of recognised catarrh, I may give the following quotation:—"Our chief remedy is bloodletting; accordingly, our first prescription was a blooding of this patient, and though very little fever is present we have repeated the blooding four times since. Its effects, indeed, in relieving the disease have not been immediately evident; but I must bid you remember the doctrine I delivered in regard to ophthalmia, that as it is, so is catarrh in a great measure a topical affection, and the more they are so, they are the more liable to elude the effects of general venesection. So our venesections here had not that effect which they would have had in peripneumonia or pleurisy."[2]

Cullen also relates two cases, both of which he at first regarded as cases of pneumonia (or, as he termed them, indifferently peripneumonia or pleurisy).[3] The first, Grisel Cockburn, had been bled before admission; she had all the ordinary symptoms of catarrh, with copious expectoration for six or seven days before she was seized with that difficult breathing and violent pain in the side which Cullen subsequently acknowledges to have been chiefly confined to the serratus magnus, and to have been altogether rheumatic in character; nevertheless he bled her thrice, though her pulse was neither full nor hard, and the immediate relief obtained was not considerable; the expectoration continued free, and four days after the third blooding the breathing and the pain were much relieved, though Cullen is unable to say whether the relief should be attributed to the blooding or to a blister which had been subsequently applied. The second case,[4] that of Colin Reid, he regarded as somewhat singular, both in its form and course. C. R. was admitted on the ninth day of his disease, yet Cullen concluded, from his state then and what happened subsequently, that no effusion of blood had taken place into the lungs. He had no stitch nor pain in the side, only a pain in the breast, which might be catarrhal—I quote the

[1] Clinical Experiments, Edin. 1683, by a curious misprint for 1783, p. 60.
[2] MS. Lectures, vol. i. p. 595. [3] *Op. cit.*, vol. iii. p. 581. [4] *Op. cit.*, p. 588.

ipsissima verba of the report,—his breathing, though difficult, was never so bad as to necessitate the erect posture, as in Grisel Cockburn's case; he was continually bawling and making a noise, which showed that his lungs could bear expansion without much pain. His case was evidently only one of violent catarrh, with inflammation of the mucous glands of the bronchia. He was twice bled on the day of his admission, because the difficulty of his breathing and frequency of his pulse showed him to be in imminent danger; he was also bled once on each of the two following days; losing in all about 3 lbs. of blood; he was blistered on both sides and on the breast. His pulse, when admitted, was 126, and gradually fell to 124, 120, 112, 116, 104, 88, and 68, on successive days, becoming irregular and intermittent after the venesection; and as this was regarded as a fatal sign, Cullen at his second visit was inclined to regard his case as hopeless.

In the library of the London Medical and Chirurgical Society, they have several MS. volumes of Clinical Lectures, both by Cullen and Gregory, in which there are several well told cases of pneumonia, which are said not to differ from the ordinary run of uncomplicated cases met with in the London hospitals at the present day: none of them being of an intensely inflammatory character, and one, at least, being of a decidedly low type; he had been bled once before admission, which took place four days after a rigor; he suffered from heat, headache, pain in the right breast, aggravated by coughing, dyspnœa, and expectoration; his pulse was full and *soft;* he was bled five times in two days, and died within forty-eight hours. There was extensive double pneumonia, and turbid, greenish serum in the pleura.[1]

In the library of the Edinburgh College of Physicians there are also three MS. volumes, one of Clinical Lectures, delivered by Dr Gregory in 1771–72, and two of Notes of Cases treated by him during 1779–80 and 1780–81. In these I was fortunate enough to find the details of seven cases of pneumonia. The first of these was made the text of a clinical lecture, and is thus introduced to the notice of his pupils as a case just admitted on January 3d.

"Betsy Moffat:[2] This is an extremely unfavourable case, with all the symptoms of peripneumony; probably a very considerable effusion has taken place into the cells of the bronchia; she is ordered to be blooded, a blister is applied to her neck, and I shall order the solution of tartar emetic, according to the particular circumstances, and venesection as the pulse will bear it; she is in very considerable danger, but I make it a rule to take in every person in an acute case." On 4th February, Dr Gregory thus continues the case, "She was seized on the 24th ult. (Dec.) with coldness, trembling, etc. You may remember upon her coming in when I was giving a clinical lecture, I made a very unfavourable prognosis from her

[1] Brit. and For. Med. Chir. Rev., vol. xxii. pp. 32, 33, 34.

[2] Clin. Lectures, 1771, p. 192.

appearance; she was breathing with the utmost difficulty, and there appeared to be a considerable quantity of matter in her breast, which was rustling in her throat, and which she appeared scarce able to throw up. I then diagnosed a peripneumony or inflammation of the lungs; and from its having continued several days, I thought it was probable that an effusion had begun to take place in the lungs, and that the chances were much against her. The circumstance of delirium was also extremely unfavourable. That is one of the terminations of peripneumonia, a translation to the head very generally proves fatal." Dr Gregory then goes on to give an admirable lecture on the nature and treatment of pneumonia, which I need not give *in extenso*, merely remarking that he commences by stating that peripneumonia is often confounded with pleurisy, but that is of no consequence, as the treatment is the same. It is called pleurisy when the pain is acute, violent, and pungent, affecting the side, with cough and difficulty of breathing, and pneumonia or peripneumonia when the pain is dull and obtuse, affecting the breast. In pneumonia the pulse is *remarkably soft*, though the febrile symptoms run very high; when the pain affects the side principally the pulse has always a great degree of hardness and tension. In respect to the fulness of the pulse in pneumonia, in the beginning before the patient is blooded, it is not only *soft but small;* but commonly upon the patient being blooded it becomes fuller, though it always retains its softness. The principal remedy is blood-letting; and in all topical inflammations this ought to be made with a large orifice, in order to induce sudden relaxation, from which the chief benefit is derived. Blood-letting ought to be timeously performed, as after effusion has taken place it is of little or no service, but, on the contrary, seems to do mischief by sinking the patient's strength. When pneumonia goes on to suppuration the end is very generally fatal, and always very uncertain, etc., etc. Dr Gregory then goes on with the history of Betsy Moffat.

"In her case it was evident that the disease must either be resolved, or she must be suffocated in a very few hours. Not much blood, only ℥viij. was taken from her at first; by this she was relieved, and then ℥viij. more were abstracted. Her belly was opened by a laxative glyster, tartar emetic in solution was administered, and a blister was applied to her back; what was to be done had to be done quickly, there was no time for delay. Next day she was a great deal better; her pulse was 134. The day after that she was sweating over her head and neck; her urine was turbid and high coloured; she rested well in the night; her pulse was 96. On the 6th she complained of great throbbing of her temples, which was reduced by leeches applied to them, and on the 9th she was dismissed cured. A few days subsequently she was exposed to cold; and on the 16th she was re-admitted, afflicted with frequent vomiting, and complaints of the rheumatic kind. She was treated as formerly: ℥viij. of sizy blood were abstracted, and tartar emetic was

administered; the venesection was repeated as the pulse was still 130. On the 18th she had passed a bad night, and when I saw her she appeared to be quite insensible; she could not speak; her pulse 104, but feeble; the great degree of defluxion at her breast and rustling in her throat was like that in those within two or three minutes of expiring, and I should not have been surprised if she had died within half an hour. She was ordered strong sack whey with hartshorn, as the most powerful cordial she could get, a blister to be applied to her neck, and fomentations to her legs. The case appeared not to admit of further bleeding. Before I left the ward, however, it appeared that the fit was due to sickness; for having thrown up a quantity of stuff from her stomach she was much relieved, and, in consequence, the blister was countermanded. She complained of pain in her head, which was relieved by leeches, and ℥iv. of more blood were taken from her arm; afterwards she complained of pain in her side, with difficulty of breathing, which was removed by the application of a blister. She continued to improve gradually till the 25th, when she was dismissed cured."

The next case, that of Thomas Brown,[1] is stated to be a very severe case of pneumonia, complicated with hepatitis. The case is very imperfect, however, and contains no particulars; he was bled six times,—the first time to ℥xij.,—and recovered.

On the 17th December 1779, James Anderson,[2] æt. 60, was admitted. "Six weeks ago, after chilliness and trembling, he was seized with acute pain in the extremities of the short ribs on the left side, increased on inspiration, and exciting very severe cough, which in four or five days was attended with a copious white expectoration, which has continued ever since. Within these four days, after exposure to cold, the complaints have been aggravated; the pain has shifted to the forepart of the breast; his expectoration has been more scanty, and he has been obliged to raise himself in bed to expedite respiration; he now lies easiest on his right side; till lately he found most ease when lying on the side affected; pulse about 90, weak; face flushed; sleeps ill; bowels regular; has had two or three vomits, and had a blister applied to his arm with little relief; appetite gone. Had a trembling fit last night." He was treated by epispastics applied to the chest, and mucilaginous drinks. On the 19th the pulse was 84, and soft, and he had ℥vj. of blood abstracted by cupping, with relief to the pain in the side. On the 23d he was convalescent, and on the 24th he was dismissed.

The next case is that of James Niven,[3] æt. 26, admitted on January 7, 1780. "On the 4th, after exposure to cold, he was seized with pain of the breast, about the end of the sternum, and in the small of the back. The complaint, after some febrile accession, terminated by profuse sweating, which flowed copiously all next day. The disposition to sweat continues, but he has a sensation of chilliness or shivering. Pain of breast is at present severe, and

[1] Notes, 1780-81. [2] Notes, 1779-80, p. 85. [3] Notes, 1779-80, p. 147.

increased by a frequent bound cough. Tongue foulish; pulse 80, and of natural strength; bowels regular; has received no medicine; sleeps ill. *Mitti sang. ad* ℥viij. *Jul. mucil.* ℥ss. *subinde.*

"8*th.*—Was not bled till this morning; blood sizy and buffed; cough severe during the night; expectoration difficult; pain continues, stretching from the sternum down the sides; pulse 96, and not very strong. *App. C. C. ad* ℥vj. *parti dolenti, sol. T. E.* ℥ss. 0·½ *h. ad 4tem vicem nisi vomitus prius elicitur. Bibat decoct. furfuris, ad lib.*

"9*th.*—Has vomited well; pain in the breast and cough relieved; expectoration more free, not yet copious, and very slightly tinged; pulse 82; bowels rather bound; copious sediment in urine. *Cap. elect. a chryst. tart.* ℥ss. *C. M. S.*

"10*th.*—No effect from purgative; pulse 72; skin cool and soft; free from cough, but slept ill; some viscid expectoration, without tinge. Continue.

"11*th.*—Some pain in his back; slight tinge in the expectoration; slept well, and continues easy. Continue.

"12*th.*—Physic operated well yesterday afternoon; slept ill; complains of pain in back. *Cap. H. A. ad.* gtt. xx.

"13*th.*—Slept ill; pains in his back. *App. C. C. parti dolenti ut educantur sanguinis,* ℥vj.

"14*th.*—Pain relieved.

"15*th.*—Dismissed cured."

Next comes the case of Daniel Forbes, æt. 40,[1] admitted on January 8, 1780. "About a week ago, while undergoing a mercurial course for lues venerea, of six weeks' standing, was exposed to cold, and soon after seized with pain in his back and left side, at the end of the short ribs, increased on inspiration; has little cough, and lies best on his right side. The symptoms of lues venerea present are superficial ulcers on the penis. Has formerly been subject to ague, and complains of pain chiefly in the hypochondrium. Pulse 96, and pretty firm; bowels natural. Has had no medicine but physic. Bled to ℥viij. Next day his pain and cough were relieved; his pulse 96; the blood displayed a buffy coat, and he was cupped to ℥vj. on the pained side. Next day the pain and cough were much relieved; but the following night, about midnight, the pain in the side recurred with some cough and little expectoration, and he was again bled to ℥x. Next day, the 12th, the blood was found buffed; the pain was relieved; he had but little cough; his pulse was 108, and soft. On the 13th the cough was much relieved; the expectoration slightly tinged; the pain in the side gone, but that in the back continued; his pulse was 96, and firm, he slept ill. *H. A.* gtt. xxx. 14th, Pulse 90; slept well; his cough to-day spits up a good deal of matter tinged with blood; still some pain in the back, but breathing easier. 15th, Convalescent, and soon thereafter dismissed.

[1] Notes, 1779–80, p. 150.

The next case is that of Duncan Maccorkadale,[1] æt. 50, a glass-worker at Leith. "Complains of severe pains in the breast, which shift about from place to place, but principally affect his right side, shooting from thence backwards; he has also severe cough and scanty difficult expectoration and dyspnœa. He lies best on the right side. His complaints are of five weeks' standing, and attacked him in consequence of exposure to cold while sweating. The febrile symptoms which were at first severe are now remitted; but complains of oppression and vertigo towards evening. Pulse 90; bowels bound; tongue clean. *Hab. Infus. lini.*"

On the 12th he got antimonial solution. On the 13th his cough was still troublesome, but expectoration free; his pulse natural; his tongue foul; he still complained of a stitch in his left side, and for this he was bled to ℥viij. On the 16th he was cupped on the temples to ℥vj., after which he continued to progress favourably, and was discharged on the 29th.

The seventh and last case is that of Katherine M'Donald,[2] æt. 22, admitted on January 11. On the 1st she was seized with severe pain in the right side, and had a febrile accession. She had been subject to cough for about a month. The pain has continued ever since, but always aggravated at night; it strikes her from the extremities of the ribs to her shoulders, and for these five nights past has prevented her lying on the right side. Within these few days the expectoration has been more copious than before; her breathing is difficult; she has chilly fits at night, which she attributes to her being obliged to sit up in bed at night. On the 3d she was vomited without relief; on the 5th she was bled, since when she thinks the pain has increased; her pulse is 100, of natural strength; she was cupped to ℥xij. On the 12th her pulse was 90, and soft. On the 13th it was 84, and her skin cool; and on the 15th she was dismissed cured.

These nine cases of alleged pneumonia, which are all that I have been able to collect out of ten volumes of Clinical Lectures and Notes, extending over—though not comprising—a period of nearly forty years, teach us distinctly,—*first*, That typical pneumonia was at least as rare a disease in those days as it is now. *Second*, That the ordinary nosological pneumonia of the clinical wards in the days of Cullen and Gregory was as widely different from the typical pneumonia of Cullen's Synopsis as our modern pathological pneumonia can possibly be; indeed the cases seem to resemble very much the ordinary run of cases of pneumonia coming to hospital now-a-days, differing only in this that now we know positively when we have to deal with pneumonia, whereas in those days the diagnosis, as we may see, was extremely uncertain. *Third*, It is evident that however much consideration was bestowed on the state of the pulse and the breathing, as criteria for blood-letting, that such was the dread of inflammation that the mere persistence of pain or other

[1] *Op. cit.*, p. 163. [2] Notes, 1779-80, p. 199.

uneasy sensation was considered sufficient to warrant the abstraction of blood, even though this might otherwise seem hazardous. *Fourth*, We learn from these cases that even in hazardous circumstances the abstraction of blood is not, in skilful hands, by any means a fatal operation, nor does it necessarily much increase the mortality from pneumonia,[1] though we have the testimony both of Alison, Cullen, and others, that blood-letting necessarily protracted the period of convalescence. From Cullen's clinical lecture on the case of Colin Reid, already quoted, we learn the reason of the very active treatment to which inflammation of the lungs was in these days submitted. He states, "That effusion of blood into the parenchyma of the lungs always kills before the ninth day, or at least does not admit of cure, as you will observe from the cases of that kind that you have in Lieutaud's *Historia Anatomico-Medica*, in which there are sixty-five such cases of dissections. Of these there are a great number in which the inflammation of the lungs was an accidental occurrence, and by no means the original disease. Accordingly, twenty-three cases out of the sixty-five are narrated without mentioning the day upon which the patient died. Of the remaining forty-two, there are twenty-four of them in which the day of the death is marked, and at the furthest it happened upon the ninth day, and there are only seven that happened upon the eighth and ninth, the deaths in the other cases occurring before that period; and with regard to those that died some days beyond the ninth day, they are generally those cases that ended in suppuration, or such as were ambiguous, and generally died upon the tenth or eleventh day. Many more of them, however, die upon the ninth day, it being readily mistaken for the tenth, as if a patient is not attacked till noon, and dies on the morning of the tenth day, that is still only the ninth, the tenth day not commencing till after noon. In Cleghorn's *Diseases of Minorca*, we also find that such persons died very early, or else ended in suppuration; and in those who die so early it is by an effusion of blood into the cellular tissue of the lungs." From this very clear and distinct statement, it is obvious that in the absence of any means of precise diagnosis the physicians of those days, whenever they met with any patient having even dubious symptoms of a peripneumonia, considered themselves justified by their pathological doctrine and the supposed dangerous nature of the malady in bleeding them to within an ace of their lives, if seen before the ninth day; while, if not seen till after the ninth day, the very fact of the patients having lived so long seemed to prove that there was something anomalous in the course of the disease, and justified their still having recourse to their *summum remedium*, acknowledging, meanwhile, that in such cases it was but a forlorn hope, and only employed in accordance with the old dogma, *Melius anceps remedium quam nullum*. In their day and

[1] The use of blisters and epispastics in those days seems to have been one great means of keeping the flagging heart going.

generation, and according to their lights, Cullen and Gregory acted no doubt wisely and well; and we must agree with Gregory in thinking, that, from his own point of view, Dr Radcliffe was "no fool," when at the age of sixty he submitted to the loss of one hundred ounces of blood, not because he thought the remedy safe, but because he considered it less dangerous than the disease; though, I think, that had both been spared till our day they would have taken rather a different view of the matter. Indeed, but for that worst of medical failings, an overweening estimation of their own times, of the advanced state of their own knowledge, and of the most recent work upon pathology, to the exclusion of a due consideration of the history of the art, they possessed even then the means of connecting many of their views, and a little more attention bestowed upon "the doctrines of *nature curing diseases*, the so-much vaunted *Hippocratic* method of curing," which Cullen derided as having "a baneful influence on the practice of physic, and as either leading physicians into or continuing them in a weak and feeble practice, and, at the same time, superseding or discouraging all the attempts of art,"[1] could scarcely have had "a baneful influence" on the practice of such energetic physicians, and might possibly have somewhat modified some of those displays of high art in medicine which astonish us not more by the boldness than by the apparent impunity with which they were practised.

Quite recently it has been alleged that, "If at a former period blood was taken too often, in too great quantity, and too indiscriminately, it is now certain that at the present day too little use is made of this remedy. . . . . A circumstance which is of special significance in this question, and which, with few exceptions, justifies bleeding, is the existence of hardness of the pulse. This kind of pulse separates abruptly the influenzal pneumonia from acute sthenic; with respect to its adaption to venesection, the former bears bleeding very badly, in the second it is useful and necessary."[2] Now, in regard to this view it is of importance to remember that the existence of "a frequent, full, hard, firm, and quick (*i.e.* sharp) pulse," is not a necessary symptom of sthenic pneumonia; because if ever pneumonia was truly sthenic, and if ever it could be supposed to require blood-letting, as it certainly did bear it well, this was in the days of that great champion of venesection, Dr Gregory; and yet we have his authority for stating that the pulse in pneumonia is not only "remarkably soft," but also "small," and that it only becomes hard when the pain affects the side,—*i.e.*, when pleurisy co-exists. Of course, in our day, we have in auscultation a perfectly certain means of ascertaining the co-existence of pleurisy with pneumonia; for the present, however, I must omit the consideration of whether this co-existence is under any circum-

[1] Cullen's First Lines; author's preface. Edinburgh, 1829.

[2] Report of Vienna Hospital for 1860, 1861, and 1862: New Sydenham Society's Year-Book for 1864, p. 138.

stances a safe indication of the necessity for blood-letting. It is sufficient to point out now that the statements—and I may add the practice—of Gregory himself afford no warrant for the statement, that the existence of a small and soft pulse indicates a pneumonia less sthenic, less amenable to treatment by blood-letting, or more influenzal in character, than one characterized by a hard pulse. This assertion is merely one of those unsupported dogmatisms with which, in the course of this controversy, medical opinion has so often contradicted and stultified itself; and it may be of service to point out, in conclusion, one or two additional striking instances in which this has been the case.

When Dr Alison lent the support of his great name to the revived theory of a change in the constitution of disease as explanatory of an acknowledged change of treatment, he brought forward the opinions of several of his medical brethren which had been communicated to him in support of this theory. One of these, a man of large experience and long in practice, thus writes:—"Again the epidemic of influenza which happened about thirty years ago was of a most decided inflammatory type, many of the cases going on to phrenitis and pneumonia of a very intense nature, and requiring, as I thought, active blood-letting before the disease could be arrested."[1] Contrast this statement with the following remarks by one of the ablest and most accurate observers that ever lived,—Dr Graves:—"The wide-spreading epidemic influenza, which lately visited the whole of Europe, including the British Isles, was not only truly remarkable, both for the violence of the feverish symptoms and of the local congestions of the chest and heart which accompanied its attack, but likewise for the unexpected relation it was found to bear to all measures of active depletion. I appeal to the profession for their testimony in this matter,—I ask whether all our preconceived opinions as to the *à priori* indications for venesection, leeching, and purging, were not found to be contradicted by the effects of these remedies in the epidemic influenza of 1833? The sudden manner in which the disease came on, the great heat of skin, acceleration of the pulse, and the intolerable violence of the headache, together with the oppression of the chest, cough, and wheezing, all encouraged to the employment of the most active modes of depletion; and yet the result was but little answerable to our expectations, for these means were found to induce an awful prostration of strength, with little or no alleviation of the symptoms. In some who were thus treated, recovery was protracted and doubtful, and the strength was not restored for several months."[2] Dr Graves makes this statement in

[1] Edinburgh Medical Journal, May 1857, p. 974.

[2] *Clin. Med.*, Dublin 1843, p. 500. It may be well to mention here that there are good reasons for believing that any apparent change of type in epidemic febrile diseases, particularly in those which are usually comprehensively termed continued fevers, have been in reality a change in the disease.—*Vide*, Murchison *on the Continued Fevers of Great Britain*, Lond. 1862. While what

the course of an interesting and able argument in favour of there being such a thing as a change in the constitution of disease. The contrasting views just given of one and the same epidemic afford a very striking proof of how much this idea of a change of type is based upon mere opinion; and this is still more remarkably illustrated by the following quotations. In a series of very valuable papers upon Fevers and Inflammations, published in the Edinburgh Medical Journal, during the year 1858, Dr Christison states:—"My own earliest acquaintance with measles, during the summer of the same year"—1817 or 1818—"was quite different. Both then, and for many year afterwards, it put on the same sthenic form—evinced by a frequent, strong, incompressible pulse, great heat of skin, and perfect tolerance of blood-letting and other antiphlogistic remedies—which characterized our continued fevers of that period."[1] While Dr Alison has stated that, "The inflammatory epidemic of continued fever observed from 1815 to 1818 was co-existent with a more typhoid form of measles than we have ever seen since; the eruption in the bad cases of this epidemic having been late, livid, partial, rapidly fading, and attended and followed by stupor, retching, dry tongue, etc.,—such cases being easily depressed by evacuation, and obviously benefited by stimulants, and, when the dyspnœa was not very urgent, very often recovering under their use."[2]

These two contradictory statements can only be regarded as both correct by supposing that both observers had generalized from too limited data. In any case, they afford a warning that medical opinion to be really of value must not be based solely upon dogmatic assertion, nor upon anything so unstable as medical statistics, but must involve a due and rational consideration of all the elements which go to constitute its truth. To the student of medical history, I cannot point to a more noble example of a mind, by a due consideration of these elements, gradually freeing itself from the trammels imposed on it by early education and lifelong habit, than is to be

has been termed a change of type in eruptive fevers has been in reality but a more or less intensive development of the disease, which thereby becomes more or less intolerant of unnecessary interference. Further, Dr Alison, when commenting on Sydenham's remarks as to the "*occulta acris diathesis*" and the "*inexplicabilis temporum ratio*," says:—"It is perhaps doubtful whether Sydenham's observations applied only to what at this day would be called epidemic diseases, especially varieties of continued fevers, or whether they applied also to some cases at least of sporadic, or what he called stationary diseases, such as pneumonia. In the latter case only, are his observations to be regarded as similar to those now under discussion; the varying types and varying modes of fatal termination of epidemics, both of the contagious and the malarious diseases,—and also of those which, as I believe, partake at times of the qualities of both,—are generally admitted; and, I presume, have been witnessed by us all."—*Ed. Med. Jour.*, May 1857, p. 975. Dr Alison thus sets aside as irrelevant all arguments drawn from the supposed variations in the types of epidemic diseases, when applied in favour of a change of type in pneumonia.—*Vide* also Ed. Med. Jour., Oct. 1857, p. 294.

[1] *Op. cit.*, July 1858, p. 42.

[2] Edinburgh Medical Journal, Aug. 1850, p. 165.

found in the later clinical lectures of Dr Alison. At first, of course, like almost every one else, he entirely disbelieved in the successful treatment of inflammatory diseases by the expectant treatment. Then, in 1850, we find him saying:—"We must admit, I think, that this practice has appeared, on fair inquiry, to be more frequently successful in inflammatory diseases, than could have been expected —*i.e.*, the practitioners who have thought themselves justified, by that theory (homœopathy) in trusting more than we do to the provisions of nature, aided only by regimen, for the cure of such diseases, have had fewer deaths and better recoveries than we should have expected;"[1] adding, in regard to a statement made by those practising expectantly, which he says is "certainly more staggering," viz., that under their plan of treatment the convalescence from inflammatory diseases is more rapid than under the depleting plan: "What we apprehend from a pneumonia, met by what we believe to be inadequate treatment, is not pure exhaustion of the vital power, but such an amount of inflammatory effusion as may either cause rapid death by asphyxia, or lay the foundation of chronic and incurable organic lesion of the lungs, the precise nature of which may vary according to the constitutions of the patients."[2] But in 1852, two years later, he says:—"The part of the statements of those witnessing such practice"—the cure of inflammatory disease by homœopathy—"which I was most inclined to distrust was the assertion, that the convalescence of the patients thus treated was usually more rapid than that of patients with inflammatory complaints treated by fuller evacuation. But on watching the progress of cases of the kind, . . . I have been satisfied that the observation is correct. The absorption of the inflammatory effusion in such cases, even when very extensive, . . . having often been effected with remarkable rapidity, and the subsequent rapid recovery of strength having indicated that the blood, although it must have undergone a change in the course of the inflammation, had quickly recovered its natural properties."[3] We see, then, that careful observation had gradually convinced Dr Alison of two most important points: 1*st*, that blood-letting is not absolutely necessary for the cure of acute inflammatory disease; and, 2*d*, that it is not necessary either for its rapid[4] or its perfect cure. So decided a change in the opinion of a conscientious medical practitioner, who for a lifetime had held opposite views, coupled with the fact that there is nothing in the past history of medicine which tends to show that inflammations have ever varied in their constitution,—though they have indubitably in all times, and more or less in every case, varied

[1] Edinburgh Medical Journal, Aug. 1850, p. 162.
[2] *Loc. cit.*, p. 163.
[3] Edinburgh Medical Journal, ~~Aug~~. 1852, p. ~~165~~. nov. 507
[4] Cullen, in MS. Lectures, already referred to, distinctly states that blood-letting retards convalescence, and renders the patient extremely sensitive to cold and liable to relapses.

in degree,—would seem to justify me in concluding that, had Dr Alison been longer spared, he would ultimately have freed himself from this latest of medical delusions,—the idea of a change of type in the constitution of inflammations;—a change of type, which, if it be necessary to explain the success of a non-evacuant system of treatment in inflammation, ought by a parity of reasoning to be necessary to explain the success of a similar treatment in cases of catarrh, of parturition, and of accident by precipitation, drowning, etc., in none of which is the formerly inevitable lancet now employed. The argument is as reasonable in the one case as in the other, and amounts to a *reductio ad absurdum* in both.

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