the pressure should be removed if pain increases, for its continuance, when the inflammation proceeds in spite of it, may be productive of disastrous results. I have once or twice known extensive sloughing take place in consequence of inattention to this precaution.

Pressure is used in a variety of ways in the treatment of chronic inflammation. When the integuments are swollen and purplish, or indurated, in cases of chronic ulcers, in enlargements and indurations of glands, in swellings of joints from synovial disease, attended with thickening of the membrane, or effusion into the joint, pressure, by means of plasters, bandages, or splints, is the most usual and the most effectual means of treatment.

It is not quite clear in what manner it controls the inflammation, or promotes the removal of effused products. Its good effects are not limited to the dispersion of swelling, for it is very beneficial in cases where no swelling exists, such as certain painful affections of joints, attended perhaps with slight crepitation, but unaccompanied by thickening of the synovial membrane, or effusion into the articular cavity.

You have probably remarked, that each of the three methods of local treatment which I have been describing,—stimulants, counter-irritants, and pressure,—are occasionally effectual in arresting the onset of an inflammation, as well as in curing its later or chronic conditions; they are employed before the acute stage has set in, and after its termination, and their good effect at these two periods is confirmatory of what I said respecting the nature of the preliminary stage of inflammation, and the state of the part in which it exists, for it accords with the view I gave you of the enfeebled energies of the organ about to suffer an acute attack of inflammation, that it should be roused to its natural condition, and enabled to break the first link in the chain of disease by remedies of the same nature as those which serve to stimulate and brace it after the storm has burst upon it, and which assist in dispelling the lingering remnants of the attack.

CASES FROM PRIVATE PRACTICE.*

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SCORBUTUS.

REMARKS.—On reference to the writings of all authors who have described this disease, particular allusion is made to the great prevalence of scurvy in former times—before its nature and treatment were so well understood as they now are. Amidst maritime communities the affection is by far the most common, and our naval history of the last century gives the most appalling details of its ravages, which were sometimes so fearful as to threaten the entire destruction of a

fleet, and often making far greater havoc than the most sanguinary battles. So remotely back as the time of the holy wars, mention is made of the complaint, and it is pretty certain, from various sources of information, that it prevailed in the kingdoms of northern Europe prior to that date. Some of the older writers state its occasional epidemic occurrence in this and other countries; and during some of these visitations many were swept off by the disease. There is one fact now thoroughly substantiated, that of all the alleged conditions entering into the causation of scurvy, diet lacking a proper proportion of acid fruits and succulent vegetables, is immensely the most important—a truth that has been abundantly corroborated by positive and negative proofs. To some of our naval commanders* is justly due the greatest credit for their correct and philosophic observations relative to many important particulars associated with a study of the affection. Being men accustomed to habits of reflection, and exceedingly desirous to banish from their crews so destructive an assailant, they carefully watched its progress and decline, tried different remedies, and endeavoured to trace to its true cause the rapid recession which it would make when the ship reached a distant port, and the diet of the men thus became changed; it was in this manner that the wonderful virtue of the acescent fruits and fresh vegetables was unequivocally established. Military medical, and other records† also furnish us with instances of its calamitous occurrence amongst the troops; and these have generally occurred after the men had been debilitated by long and laborious campaigns, and when so circumstanced as to be unable to procure the proper amount and right kind of provisions. Fodéré tells us that the soldiers in the army of the Alps suffered by it very severely, and Larry remarks the prevalence of scurvy during the siege of Alexandria. The reports, which during the last ten or twelve years have been given to Government authorities, relative to our prisons, gaols, and hospitals, have attested the fact that error in kind, or insufficient quantity, of diet constitute the most fertile of all causes in the production of scurvy. The general failure of the potato crop two or three years ago, undoubtedly gave rise to the unusual prevalence of the complaint in question—a position which those who saw much of the mode of living amongst the poor, the immensity of their destitution, and the general distress which the loss of this valuable article of food gave rise to amongst them, can indubitably attest. Turning from these general observations respecting the disease, and confining these brief remarks more particularly to the case now given, it will appear manifest that causes brought into operation in a solitary case, from a combination of circumstances of a nature similar to those

* Cook, Parry, Berkeley, Bridport, Hawkins, etc.

† Larry. *Thém. de Chr. Militaire*; *Hist. de Louis ix.*, par le Sieur Joinville; Hume, Lingard, Alison, etc.

where this influence extends to numbers, were followed by like results; and, as the sequel will show, such clearly consisted in an improper and scanty food. The patient having long laboured under dyspepsia, had for that complaint sought the opinions of various practitioners, and the last under whose care he was previous to my being called in, strongly recommended one description of diet, which, as he fallaciously conceived, was indicated until the digestive organs had fully regained their tone. As stated in the report, for two years the individual had lived chiefly upon stale bread and tea, and when I first saw him, his stomach had become so debilitated that most other kinds of food could not be taken without producing distension and disorder; if he ate a full meal it was sure to render him very unwell. I may here mention, that amongst the lower classes of society, there is a description of dyspepsia produced by individuals living so much upon slops, which their straitened circumstances compel them to do, and which those practitioners who have had much communication with the poor cannot fail to have noticed. Amongst many of the lower orders, tea and cake form the staple articles of diet; and these persons, when they apply at the hospitals and dispensaries, complain of watery eructations, flatulence, gastric distension, and cardialgia; the pulse is soft and resistless; bowels torpid; and frequently there is flabbiness of the muscles, with more or less of general emaciation; and the patient upon being interrogated, will often say that any other kind of food produces pain in the stomach and much uneasiness. I recollect that my friend Dr. Hughes Bennett, now Professor of Physiology in the University of Edinburgh, first pointed out this fact particularly to my attention. That gentleman also told me that he had not long before attended a case very illustrative of this position. A young lady who resided (if I recollect rightly) at Montrose, came to Edinburgh to obtain advice for a stomach disorder, under which she had long suffered, and placed herself under the care of Dr. Bennett. On being interrogated, she asserted that tea and bread were the only articles of food she could take. She was weak and emaciated; had become nervous and irritable; the bowels were disordered; and she complained of flatulence and cardialgia. Dr. Bennett very properly prescribed mild tonics, ordered her to take no more tea, and to have a varied and animal diet, under which she rapidly recovered.* Those practitioners who reside in rural districts, and who may chance to peruse these remarks, will bear me out in the foregoing statements, that amongst the labouring poor, the

disease in question is very frequently met with; and so far as my own experience warrants me in giving an opinion, restriction as to the quantity of warm liquids, the daily allowance of fresh animal food, and ten or twenty drop doses of the diluted sulphuric acid, in a weak infusion of calumba, or in water, is a very successful mode of treatment. Considerable quantities of diluent liquids cannot fail to impair the digestive organs; first, by diluting too greatly the gastric juice, and thus preventing that reductive action upon the food, so necessary in this, the first stage of digestion; the parietes of the stomach become morbidly distended by the evolution of gases; the contents of the organ are propelled, insufficiently acted upon, into the duodenum and lower parts of the alimentary canal, and the conversion of the ill-formed chyme into chyle is imperfectly performed; the bowels become disordered from the passage of indigested matters; hence diarrhoea, or constipation, caused by irritative action on the digested surface, or the collection of crude matters. The circulation being in a secondary manner rendered slower, the liver becomes engorged, and disorder of the biliary apparatus is superadded to the morbid conditions already existent; and so it is, that whenever there is chronic dyspepsia, the practitioner may rest assured that the functions of the hepatic viscus are more or less at fault.*

It has been said that the patient whose case is now particularly considered, lived, during two years, mainly upon one kind of food, under which those symptoms that could not fail to follow succeeded, and scorbutus was the result. When I first saw him, the bodily powers were much reduced; the eye looked dull and listless; lips blanched; cheeks fallen; gums mottled and vascular; teeth loosened; extremities swollen; petechiæ, and dark hæmorrhagic patches, were also manifest, and it was too obvious that unless some amendment was ere long produced, a fatal termination would ensue.

Between purpura hæmorrhagica and scorbutus,† there is an essential difference, notwithstanding some nosologists having considered them identical; and this difference appears indisputable, from the following considerations:—Because scurvy comes on at certain periods, at least, whenever it is considerably prevalent during particular seasons; scurvy comes on gradually; purpura

* For information on this subject the reader is referred to Dr. Wilson Philip's excellent treatise on "Indigestion."

† The late Dr. Graham, of Edinburgh, once observed to me, that his experience impressed him with the opinion, that intemperate butchers, those who were hired by the master-butchers as slaughterers and assistants, were particularly prone to purpura hæmorrhagica. This class of individuals in Edinburgh is almost invariably addicted to drinking large quantities of ardent spirits, and lives chiefly on animal food. During the time of my being Clinical Clerk in the Royal Infirmary of that city, some instances confirmative of the Professor's opinion, are now distinctly remembered. Was this condition owing to too much nitrogen being taken into the system?

* I distinctly recollect that Dr. Christison, in his Lectures on Dietetics, gave it as his opinion, that in convalescents from fever, and other patients, where much general debility was present, and where the individuals asserted they could not digest soups, that small quantities of well-cooked mutton could not only be taken with impunity but benefit; and my own observations have confirmed this remark.

often quickly; in the one, spongy gums invariably are seen; in the other this is not the case. In scorbutus, acid fruits and succulent vegetables will alone produce a cure; in purpura they are taken without effect. In the one, blood-letting is often of great service; in the other, it would be followed by considerable aggravation of the symptoms; hence, from these facts it cannot be said that they are really the same, although admitting of many similarities.

The study of those morbid conditions in the system which give rise to scurvy renders them of deep interest to the scientific pathologist,—to him who examines the causes as well as the effects, because its study shews him that a primary change in the blood will readily affect the entire system, and produce morbid anatomical conditions of the gravest character; and, indeed, a reflection on these changes inclines us to think with less prejudice on those humoral doctrines with which the minds of the older physicians were so much imbued. Some writers have affirmed that scurvy was dependant upon capillary distension; but experiments have tended to an opposite opinion, because, when a limb has been injected, the extravasation, if any, that has been produced, was not discernible to the naked eye, either in the integuments or in the sub-cutaneous cellular tissue, or between the muscles. If it were

dependant upon capillary parietal distension, it would not be too hypothetical to presume that the nervous system was the primary seat of the disorder, because the nervous fibrillæ which supply the extreme vessels with nervous energy, improperly performing their functions, the vascular extremities acquire a tonic fulness—a fact that has long been established by positive and negative proofs. For instance, in fever the capillary system sympathises with those changes which are produced in the great nervous centres,—a doctrine propounded by Hoffman, and established by Cullen. Again, in those cases of apoplexy described by Abercrombie as *nervous apoplexy*,* the extreme vessels are affected, but in a manner opposite to that which they are during the febrile paroxysm; the brain, from a diminution of nervous power in itself, fails to transmit the requisite nervous energy to the fibrillæ; the walls of the capillaries are morbidly resistless, and transudation of the aqueous particles of their contents takes place, and thus occurs that not uncommon symptom of copious perspiration. From a consideration of these facts, we cannot refer the true cause of scurvy to disease in the capillaries themselves. That the blood is in a vitiated condition, and that the other phenomena are entirely dependant upon its morbid changes, certain considerations tend to prove. In all the

* A few days ago I was hastily summoned in consultation to a case of what I considered a good example of the above description of disease. The individual was a gentleman, between 60 and 70 years of age, stout and muscular, and had been paralytic a year previously; for, remarkable to say, exactly twelve months from that day he was struck down in apoplexy, which left paraplegia of the left side. This gentleman throughout life had been a man of active business habits, and constantly engaged in large monetary transactions. Having acquired a handsome fortune, he retired into private life, soon after which he had the first fit, but after that attack he so far recovered that he had determined to resume his former calling, the monotony of retirement being felt so irksome. About eleven o'clock in the morning he was found lying on the dining-room floor, in what was conceived to be a dying state. A few minutes previously he had been seen by some of the inmates, and was then, to all appearance, in wonted health. On my arrival he was in bed; the general practitioner who had first been called, and who had been in attendance half an hour, had bled him to twelve ounces. The pulse was of large volume, and quick; the pupils contracted; much convulsive action of the muscular system; the head not very hot; the face, neck, and chest, cool, and bedewed with a copious perspiration. The gentleman in attendance very properly said, that although the pulse felt as if it were a bleeding pulse, yet further abstraction was the question. I did not hesitate, after even a cursory review of the symptoms, to give it as my opinion, that no more blood should be drawn, but in preference recommended powerful counter-irritants. Sinapisms were quickly applied to the thighs, calves of the legs, the nape of the neck, and along the whole course of the spine, with hot bottles to the feet. An injection, with an ounce of turpentine, and two drachms of the compound spirit of ammonia, in half a cupful of starch-gruel, was quickly administered, but only for a moment retained, as the sphincter was quite relaxed. Soon after the mustard plasters were applied, the unwelcome symptoms began to disappear, the pupils became larger, breathing more natural, countenance improved, and pulse softer. As the bowels had not been moved, it was agreed to administer an enema similar to the

last, but in a quart of gruel, which was retained. In the course of a couple of hours he was so greatly improved, as to be considered out of danger. Now, in this instance, I have little hesitation in thinking, that if the surgeon had allowed the blood to flow until he had "thoroughly lowered the pulse," the symptoms would have become more formidable, or perhaps the patient would have rapidly sunk, because, as observed in the text, this I considered to be of that description of apoplexy in which there is considerable prostration of the nervous system, as evinced by the copious perspiration. In a stout, broad-chested individual like this gentleman, it was desirable to relieve the congested lungs and the overloaded heart, but in so doing the greatest caution was requisite, seeing that Scylla and Charybdis were on either side. I recollect some few years ago being called to an elderly female who was struck down in her third apoplectic seizure; the pulse was strong and quick; she perspired very freely. Being alone guided by the pulse, I determined to bleed; scarcely had four ounces been taken, when the pulse suddenly became smaller, and in a few moments the patient expired. It could not possibly be said, that she would have recovered if she had not been bled, yet I am ready to admit, that it would have been better had the lancet not been employed, and the recollection of that case will always make me think carefully before blood-letting is had recourse to, where there is much sweating.^a I have mentioned the latter instance because I always reflect upon it as an error in treatment, and in the hope that it may warn others, when called to instances of a similar nature. In medicine, however paradoxical it may seem, the most valuable lessons of practice are not always gained from what has been done right, but from what has been done wrong; and it would be profitable often if we knew the mischances as well as the lucky hits of those who write on and practice our too frequently doubtful art.

^a The supervention of powerful diaphoresis as critical in continued fever, is ever to be regarded as a most unwelcome symptom, because it shews the great debility of the nervous centres. From a more extensive consideration relative to the pathological fact in question, the reader is referred to a series of papers on Fever, which the *Medical Gazette* did me the honour of publishing in the years 1846-7.

post-mortem appearances which I can find given of this disease, paleness of the tissues is particularly mentioned, consequent, of course, upon diminution of red particles; and as physiologists have unequivocally exemplified, that the vivifying influence resides in these particles, their diminution must give rise to diseased conditions of a more manifest and general character. These red particles are in an occult manner derived from the materials produced by digestion, and require certain constituents; but if the ingesta are such as not to yield the requisite constituents in due quantity, the elaboration of the particles must needs be imperfect, and the portion given off unequal to the imperative demands of the system; hence the loss of vivifying power, and the conditions which constitute disease. Acid juices and succulent vegetables, by possessing these elements, promote the cure. In scurvy, the occurrence of syncope is one of its symptoms; now, in anemia and chlorosis the same occurs, and in the latter, we know that the red globules are sometimes diminished to even one-fourth of their normal quantity, and in such instances syncope is a common symptom; hence, from similar causes similar effects. The first indication of scurvy is a tawny dulness of the skin, manifestly proving that the blood is primarily diseased, and that to its lesion we must refer its true pathology.

It being conceded that the blood is in a morbid state, the next question which may be asked is,—how are the petechiæ, vibices, and hæmorrhagic patches produced? It is a physiological fact, and one that has long ago been pointed out by Le Gallois, and other philosophic enquirers, that the action of the capillaries is imperfectly carried on unless they receive a stimulus from their contents, and this stimulus can alone be properly produced from healthy arterial blood, therefore, when their stimulus is diminished their functions become impaired, and congestion and extravasation result.

On reference to the above case it is seen there was œdema of the inferior extremities, with indurated thickening of the integuments* at the flexures of the knees, conditions almost invariably present in true instances of this disease. These morbid depositions are by far most common in the inferior extremities, in the sub-cutaneous cellular tissue, and between the muscles, and are in some measure dependant upon

gravity. From whatever cause debility of the circulatory function is produced, swelling of the legs is a most probable result, dependant chiefly upon gravity; but in this disease there is a morbid state of the blood itself, as spoken of above, which must considerably favour such result. In those cases in which there is a rapid circulation, fibrinous effusions are more common than when the pulse is slow.*

The constant relaxed state of the bowels, and the light-coloured stools, in the instance of this man, are symptoms highly indicative of the complaint. As he improved the evacuations became more natural.

Soon after my attendance on this person, other cases of scurvy came under my observation, but these were of the milder form of the disease, and being treated at an early stage, were soon, under ordinary remedies, restored to health. The cases referred to were confined to the lower orders, and attributed to the scarcity of potatoes, upon which the poor are so dependant as a chief article of food. It having previously been pretty clearly shown that the loss of this vegetable gave rise to the unwonted prevalence of the disease, I will not here enter upon a question which Einhoff, Vauquelin, and others, have from their chemical researches satisfactorily explained; but I may add, that in those cases which I saw, the individuals for months before had been unable to procure the potato as an article of diet.

In the conclusion of those cases which during the last three months have appeared in the pages of this Journal, I must offer some apology for the length to which the subjoined remarks have inadvertently extended, yet, as the imperfect observations that have appeared inclined to practical results, it is trusted they have not been wholly unprofitable to those who might chance to read them. Being such examples of disease as from time to time are met with in provincial practice, it is not to be expected that they would be of that rare description which the medical officers of metropolitan institutions can cull from their case-books; it would, however, afford me much delight if their publication in any degree tended to induce some of the numerous well-informed members of our profession which there are now to be found in all the remotest districts of the country, to record those instructive illustrations of disease which frequently come beneath their notice. There was a period in the history of our profession when medical literature, unless it emanated from schools and colleges, had the qualifying recommendation of springing from the too-often erroneously conceived fertile brains of metropolitan

* Some chemical pathologists have affirmed that there is positively an abnormal increase of fibrin in the blood of scurvy patients—a statement, unless well authenticated, that appears doubtful, because, although the coagulability is not destroyed, it is certainly less than in healthy blood; while the solution of continuity in the cicatrices of old ulcers, argues powerfully that the plastic properties of the fluid are diminished. Those who have propounded the doctrine of excess of fibrin, base their opinions in some measure upon the circumstance of abnormal organized depositions being common in various parts; but the languor of capillary circulation,—the capillaries rupture, as explained in the text,—together with the effects of gravity, seem sufficiently to account for the morbid anatomical characters in question.

* Some physiologists have denied that the *vis-a-tergo* has any influence whatever on the extreme vessels; this fact alone is rather at variance with such doctrine,—or is it merely from the greater transit of fluid, that more particles are extravasated,—and not from the force with which the blood is propelled.

big-wigs,—was held in but slight estimation, as if the phenomena of disease could alone be accurately studied in the halls of a hospital, and opinions and practice alone with safety received through the *ipsi dicunt* of lucky professional dignitaries, or, it might be, courtier or *divinely created* physicians. Let those who question the position maintained refer but to the numerous talented productions that so frequently appear from provincial practitioners, and they will at once be convinced that the abilities of these authors are not mediocral—that they have an indefeasible right to “say their say,” and that their opinions and doctrines should be canvassed with respect. Not long ago, one of the judges at a medical trial very correctly observed, that scarcely any town in the provinces was without its Brodie or its Locock,—that is, if circumstances for observation, and the chances of gaining the ascendant, had been offered to them, as they have been to the names referred to. It is true that there are advantages in the three capitals which afford greater facilities for prosecuting professional enquiries, and obtaining professional eminence, which provincial towns do not afford; yet it is within the power of every man, if he chuses, however disadvantageously situated, to achieve much more than he would at first have conceived practicable. Every one setting himself up as a practitioner of the “healing art,” virtually enters into a moral compact with his patients; and he who does not avail himself of those sources of information placed within his reach, is nothing less than a moral delinquent. No man has a right to conceive, that going forth armed with his diploma, he is henceforth the sure and competent practitioner,—that the study of his profession has terminated, for it might more truly be said, that it has then but really begun; and he who ceases to be the student, should cease to be the practitioner also. Every day's experience must convince the medical man that the progressive enlightenment of the public must render them less easily made the dupes of chicanery and mysticism than they once were, and that boasted nostrums and secret remedies, are regarded, and rightly, with suspicion. The system of “elegant draughts,” and “nice comforting cordials,” given with little reference to the fundamental causes of the complaint, is fast exploding, and the well-educated are no longer to be the victims of such gullability; they have learnt, however, more correctly, to recognize the man of scientific acquirements—him who exercises what Armstrong termed the *genius* required for medicine—reflection; and the assuming boasters must, ere long, give way to their well-informed and thinking competitors. Routine systems, and conventional notions, are becoming tested by their claims to truth, and accepted according to rational deductions. The indefatigable labours of many of those who cultivate the science of medicine in that spirit of energy and zeal in which alone it can conscientiously be followed, are

every day shedding new lights upon what was once obscure; they are trying, through experiment and ratiocination, to account for anomalies, and, as far as possible, render the science an exact one,—to bring treatment more successfully to bear upon disease,—to attack causes instead of the effects of causes—symptoms; and render more potent an art, of all others, of the greatest concern to humanity. All then are bound, so far as it lies in their power, to lend their aid in carrying out such laudable changes, and every new fact established will add another stone to the fabric of truth and certitude, which is gradually rising beyond the levels of prejudice, and above the wrecks of error. Those mistakes into which we sometimes fall, might often have been averted by more careful examination and patient reflection; and an error in diagnosis is not unfrequently attributable to a hurried review of those phenomena that are thrown out in boldest relief, and more likely to impress the mind.

At a future period it is my intention to endeavour to show, that many medical men do not sufficiently cultivate the *faculty of perception*, by which alone we can decide on those nice distinctions, when even opposite conditions are simulated, and when this or that way of thinking would involve important results; this, with some other considerations suggestive of improvement in the manner whereby medical knowledge would appear to be more correctly pursued, I hope more fully hereafter to dilate upon, and will be contented here with a mere advertance to the fact. As sometimes grave causes can only be distinguished from partially-developed and intricate appearances, it is essential that we should cultivate the powers of detecting these to their fullest indications, and with the greatest certainty.

In some of the foregoing cases, as it will be recollected on their perusal, there was much room for diversity of opinion, and in some instances the treatment was based upon a correct solution of conditions, that, when cursorily reviewed, would seem problematical; and if certain considerations there mentioned were recounted, it would be manifest that it is of weighty import to remember states in the progress of diseases, which must be seen, and cannot accurately be described. To pursue these and many kindred considerations, would here be out of place, but it must be conceded that, although medical science has of late years made gigantic strides, yet until the true spirit of independent enquiry becomes more diffused, and all will study as well as profess their art, there will be fallacies existing, and erroneous opinions maintained.

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