in general characters corresponded pretty closely to the decidua vera. There is in fact no means of distinguishing it by microscopic examination from casts obtained in cases of extra-uterine gestation, or from fragments of decidua vera; and the only essential distinction from the decidua of uterine pregnancy is the entire absence of admixture of fœtal (chorionic) elements, that is to say, no placental site can be discovered. From the casts of membranous dysmenorrhœa it is readily distinguished, for while in the latter there may be found scattered large cells, the connective tissue stroma of the endometrium shows inflammatory changes, but no extensive large-cell formation.

From these considerations it is apparent that serious error is much more likely to arise in connection with the maternal than with the fœtal products of gestation. Decidual cells are in themselves less conclusive evidence of gestation than villi, and from their likeness to cells of malignant origin an error may be attended with disastrous consequences, whether that error be in the direction of mistaking decidual for sarcoma cells, or *vice versâ*.

REMARKS ON DYSPEPSIA AND A DIET.[1]

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I will only venture to hazard a few remarks towards the subject of discussion, conscious that the importance and value of the contributions already made to it by so many well-known experts must render anything I can say of little weight. I have on the billet the title of a paper dealing with the actions of diets and drugs upon the chemical and bacteriological processes in the intestinal tract, which I had intended to read as my offering; but as the time left at the disposal of the section is so circumscribed, it would be unwise in me were I to attempt to do so. As the paper took years to compile, months to write, and would require an hour or so to read, it were better left alone.

In connection, however, with one of the questions touched upon in it, namely, the influence of intestinal fermentation upon healthy (if it can ever be so, under the circumstances) gastric digestion, I may say that lately I have been surprised at the frequency with which patients come complaining of some fancied disorder of the stomach, for which they have been treated in the usual manner, who prove on investigation to be suffering primarily from the metabolic misdeeds of bacteria in the bowel.

They undoubtedly presented symptoms of gastric disturbance, quite independent of hepatic troubles, while the state of the

[1] From the discussion on "Treatment of the Diseases of the Stomach," in the Section of Pharmacology and Therapeutics, British Medical Association, July 1898.

intestinal contents was usually but not invariably accompanied by auto-intoxication. By humouring the stomach with rest; with milk in small quantities and frequently, either in a natural condition, or variously diluted and modified, thereby diminishing the numbers of bacteria admitted, or altering their species; by the use of calomel to destroy the bacterial forms in the contents of the duodenum and jejunum; of creasote, guaiacol, or other similar substances to deal with those in the ileum; and of salol to act on the micro-organisms in the ileum and large intestine; by prohibiting all malt liquors and fortified wines; allowing, if stimulants are advisable, whisky diluted to 4·5 per cent. of alcoholic strength (1 oz. with 10 oz. of water), or champagne in moderate quantities;—by such measures a rapid subsidence of all the symptoms is promoted. Cheese is often of benefit in this condition, given on each occasion in such amounts as the stomach can comfortably deal with. If this marvellously adaptable organ (considering the persistent ill-treatment, lay and medical, meted out to it) can digest cheese in fair quantities, its use may be pushed.

Shakspeare was sensible of the attributes of cheese in the process of digestion, and alludes humorously to it in "Troilus and Cressida" (Act ii. Scene 3), when he makes one of his characters exclaim—

"Where, where!—Art thou come? Why, my cheese, my digestion, why hast thou not served thyself in to my table so many meals?"

Cheese is an excellent breeding-ground for many of the lowlier members of both the vegetable and the animal kingdoms. How can it, full of the organic agents of fermentation, check organic fermentative changes? Cheese undoubtedly possesses a considerable power of arresting or inhibiting those bacterial processes which are the actual agents in the production of intestinal dyspepsia, with its signs and symptoms,—unless, indeed, it prove of too irritating a nature towards the mucous membrane of the alimentary tract. This power, I believe, is due to the antagonistic properties of two classes of organisms.

It has been suggested in Germany with regard to the antifermentative action of cheese, and of kefir, that the carbohydrate moiety, although so small in such bodies, is the active antiseptic agent; I believe that the bacteria themselves form the pharmacological *basis* of the cheese prescription. The acids formed by these bacteria are inimical to putrefactive processes. The fermentation of the one class of organisms is incompatible with the fermentation caused by the other class. The great aim to strive for in excessive intestinal fermentation, *alias* putrefaction, is the destruction of the causal agents. Two methods are available—to forcibly drive them out of the bowel, or to inhibit their growth *in situ*. These two methods should be used together. The first

needs no further notice. The second may be carried out by the use of antiseptic drugs, by dietetic control of the bacteria swallowed, or by measures taken to raise the proportion of free hydrochloric acid in the stomach to a strength sufficient to inhibit the growth of, or prove fatal to micro-organisms partial to alkaline media, whether the acid-affecting forms are hindered by it or no. The ordinary conditions present in the contents of the bowel bear witness to the greater supply and prowess of the acid-fermentative agents. The reaction of the contents, save perhaps in a short portion of the lower end of the duodenum and upper part of the jejunum, probably are always acid, even if only slightly, in health—the cause, the metabolic processes of bacteria-producing organic acids as their natural output; the effect, a controlling influence over the growth of their kindred, but still their rivals, the bacteria of putrefaction. The first class, as a rule, produce no poisonous substances, unless the alcohol they often form from carbohydrates be considered as such; the second class live largely on proteids, and, being extravagant by nature, use but little in support of their bodies, while manufacturing an excessive amount of unnecessary and innutritious substances to obtain that little.

Some experiments which I have carried out on dogs seem to show that calomel acts upon the bacteria in the stomach contents, and in the higher parts of the small intestine; creasote and other antiseptic bodies of the same type act most powerfully below the jejunum; while the action of salol does not become marked until the middle of the ileum is reached. On testing the contents of progressive sections of the alimentary tract of the dog, killed two or three hours after the administration of a final dose of salol, no evidence of its decomposition could be obtained above the mid-ileum. Theoretically, salol is neither decomposed in nor absorbed from the stomach; experiment, however, has demonstrated that it can pass, presumably unchanged, through the stomach walls, and become altered in the blood, its derivatives appearing in the urine even if prevented from entrance into the gut. This has been shown in the dog. The duodenum was severed close to the stomach, and the pyloric end of the stomach pulled forward through the abdominal wall. Although it was impossible for the drug to reach the bowel, the dog's urine contained salicyluric acid, notwithstanding the complete failure of the test for that body in the contents of the stomach.

Calomel and salol, then, may be regarded as antiseptics acting in different spheres of influence. I usually commence with a small dose of calomel, followed by a saline purge; and begin on the following day with 8-gr. doses of salol thrice daily. A large dose of calomel is not required. It is a rather remarkable fact with regard to that drug, that the production of the per-chloride of mercury, which must be the form through which it exerts an antiseptic action, and for which it is indebted to the

hydrochloric acid of the gastric juice, does not appear to be proportionate to the size of the dose of subchloride. The transformation of a very minute portion of calomel into the perchloride is quite sufficient for all antiseptic requirements. After commencement of the salol treatment, a dietetic programme may be begun.

I have little or no faith in strict, hard-and-fast, empirical diets, and in this connection both gastric and intestinal dyspeptic conditions are alluded to. The habit of laying down unalterable dietetic rules, unalterable for indefinite periods—until the patient, may be, gets well—leads to a practice of giving all patients who have any gastric trouble the same diet and the same limitations. Each dyspeptic is different from all others. Each case possesses some little idiosyncrasy, at least, which may be profitably taken into account. There is no doubt that many patients progress far more satisfactorily when they are entrusted with part of the responsibility for the proper conduct of their course of treatment, and when encouraged by a hope of achieving a return to normal health partly by their own endeavours.

How often a patient, questioned as to his malady, for which he has suffered at the hands of many, confesses that he is ignorant of its nature, or of the opinions as to it held by those whom he has formerly consulted. He has received advice, been given rules in great number, or been put on a very restricted diet, but has never been informed what the reasons were which led to their adumbration. He knows not why he must not eat cabbages, although cauliflower tops or young turnips are *en règle*; why tomatoes and strawberries are anathema maranatha, bananas permitted and innocuous. This, of course, applies more particularly to advice given to patients seen in the consulting-room. Surely it is preferable and of greater promise to explain the why—the extent of the information varying in proportion to the state of the nervous system evinced by the patient, his cerebral intelligence, the condition of his inhibitory or acceleratory mechanisms; the how—based upon the why, and most useful when scriptory; the when—with adaptation as far as possible to the ordinary habits of the patient, many of which cannot be altered with impunity; and, lastly, the what—varying with each patient, and incompatible with any rigid dogmatism on the part of the adviser.

You will probably say that these statements are truisms and platitudes, but they are re-told because I have lately met with patients who were suffering from a diet, not from a disease. An example may be instanced. A gentleman had consulted a physician nine months before for an attack of dyspepsia. He was advised to restrict himself to a very meagre diet, and led to believe that any future transgression would be dangerous to health. The original attack had been of a slight nature. Nine

months later he had become nervous, despondent, even melancholic. His diet, which he had understood to be absolutely necessary for well-being, haunted him. To be able to eat only the one or two forms of food allowed him during the remainder of his days! Undoubtedly he was to blame for not attempting a fuller menu, but still more was the physician who omitted to state any limit of time for the cessation or for the amplification of the diet-sheet. I am afraid my treatment was unprofessional and scarcely orthodox. He was set down to a good meal, the first he had had for months, played a good knife and fork, was none the worse of it at the time, and from its lessons soon recovered his spirits and health. Before this he was timorous, oppressed, filled with loathing for the articles of food allowed him, and for his dietetic future; afterwards his mind was cheered by visions of untrammelled choice of culinary tit-bits, should he avoid everything which gave him the slightest warning of disagreement. To quote the "divine William" again, a vivid description of the effects produced on patients, especially of nervous habit, by a "diet" is to be found in Henry IV., Part I. Act ii. Scene 3, although the lines of the text apply in truth to dyspeptics in general:

> "Tell me, sweet lord, what is't that takes from thee
> Thy stomach, pleasure, and thy golden sleep?
> Why dost thou bend thine eyes upon the earth,
> And start so often when thou sitt'st alone?
> Why hast thou lost the fresh blood in thy cheeks,
> And given my treasures and my rights of thee
> To thick-ey'd musing and curs'd melancholy?"

Just such a one have I seen cursed with melancholy and a diet.

Granted that a rigid dietary often removes the cause of the original disease, and if only continued for a limited period, with permission to increase it as far as it is compatible with comfort, does an immense deal of good. By a rigid diet I do not allude to such as are given to gouty and rheumatic patients, or to those of oxaluric tendency, but to the form of dietary, so often enforced, in which milk, slops, pap, raw meat, etc., are ordered to be taken severally. Any of these regimens may be given with great benefit for a day or two, but may then, as far as my experience goes, be added to little by little, with caution, and according to the results experienced. I have never yet met with a patient who required the continuance of such jejune diets for more than a few days. *Præmonitus præmunitus.*

It is surely begging the question to argue that the mental capacity of the majority of patients who come for advice is not sufficiently acute to grasp, or appreciate, the problem presented by their own conditions, or to carry out intelligently a course of dietetic treatment based largely on their own recognisances. Does not this matter depend on the lucidity of the adviser? Is it impossible to introduce into the cerebral cells of dyspetics such

simple rules as are amply sufficient to guide them in the course they should rationally pursue? Some there are who can form no clear conception of what is required of them; few are without a regard for their prospective gastronomic abilities and allowances so pronounced as to neglect active endeavour in the present, with a view to personal pleasure in the future. Most patients may be given some degree of individual licence; should be encouraged not only to perform their daily duties, but also to cultivate a hobby to fill up their unofficial time; should read Dickens, Rudyard Kipling, Barrie, Longfellow's "Excelsior," and similar works; not poems and plays by Ibsen, novels of the latest *fin-de-siècle* hopeless type, nor those works of so-called fiction written for a purpose, the unriddling of which simulates the solving of a conundrum.

The dyspeptic, interested in the progress of his cure, and inquisitive about what his next forward advance may be, forgets to be depressed by the dismal future before him, or to picture an infinite succession of diurnal meals of sloppy food, a vista necessarily suggesting the question, Is such a life worth living? When encouraged, on the other hand, by the prospect of enjoying in time the pleasures of the table—*recherché* dishes, treasured vintages; should he be careful only to add from time to time such articles of diet as personal trial shows are tolerable; be self-denying at the start, which he will be with a greater serenity of mind, aware that more may follow; and sustained by evidence of his advancing capabilities, though rigorously eschewing such things as do not agree, and only venturing to try them again when his digestive powers have increased—he will exhibit more satisfactory progress than if he had been restricted to a narrow menu for an indefinite period. The primary lesion may perhaps be cured by the latter method as quickly as by the former, but the indefiniteness of its goal works mischief; while the other removes the dyspepsia, benefits the general health of the patient, and prevents melancholic apprehensions.

My picture, I fear, has been touched in from too strong a palette; the high lights too brightly, the shadows too opaque. If it had been painted in half-tones, although with the same pigments, it might not have been so impressionistic, but would perhaps have formed a picture truer to nature. The subjects presented by medical science are now so numerous and so far-reaching, while each individually exhibits so enormous a range, that each observer is forced to confine his studies on any special subject to some small portion of the whole—a fact which must serve to explain the paucity of my themes. But they have been drawn from what are to me "attractive bits," and I trust that their delineation may prove of service to those who advise and to those who possess disturbed digestions.