

of abortion—pain and hæmorrhage—are witnessed very soon after the occurrence of the accident. If the shock is experienced after the eighth week of pregnancy, then the compact union which exists between the chorionic villi and the serotina may prevent the blood thus extravasated from forthwith making its escape externally, and consequently labour-like pains may be complained of for a greater or less length of time before any hæmorrhagic discharge from the uterus makes its appearance. The immediate effect of an accident of this description is not, however, regulated altogether by the extent to which the placental tissue has been disturbed, but depends in some measure upon the state of the uterus itself. The pent-up blood even may become organised, and in undergoing this change it may eventually so interrupt the nutrition of the foetus as to cause its death.

Through the agency of the nervous system hæmorrhage during pregnancy from the serotinal sinuses may be caused by some emotional disturbance, but especially by that arising from intense fear or grief. Under such circumstances the hæmorrhage is usually accompanied by more or less pain, but in all cases the emotional impression will not forthwith exert its deleterious influence upon the pregnant uterus, as it frequently happens that two or even more days may elapse before any evidence of disturbance of this organ is observed.

When a uterus which contains myomatous growths harbours an impregnated ovum the implantation of the chorionic villi may to a greater or less extent be interrupted by the presence of these tumours, and the uterine sinuses which are in this manner deprived of the support of their opposing structures may readily rupture and hæmorrhage may consequently ensue. In a few cases even the blood may flow from a superficial varicose vein which has ruptured, for vessels in this condition are occasionally observed in the unimpregnated state in the neighbourhood of myomatous tumours, which are developing towards the interior of the uterus.

Hæmorrhage may also be caused by uterine contractions excited by pelvic adhesions, which so bind down the uterus that it cannot expand sufficiently or rapidly enough for the developing ovum.

Hæmorrhage may arise, too, in consequence of the presence of a pathological product of conception, such as hydatid mole.

In a few rare cases the blood comes not from the interior of the uterus, but from the cervix, which either shortly before or during pregnancy has become the seat of cancerous change.

Treatment.—If the hæmorrhage is due to want of tone in the uterus, a condition which is often caused by over-lactation, too frequent child-bearing, or repeated emotional disturbances, then some drug should be administered which will, as far as possible, maintain the tone of this organ. To effect this small and frequently-repeated doses of ergot and iron or ergot and strychnia may be given. If the hæmorrhage has been induced by physical or mental shock, and is accompanied by pain, then a bromide salt or opium, conium, grindelia, &c., should be tried. Under any circumstances absolute rest should be enjoined, constipation should be avoided, and a non-stimulating but nutritious diet should be allowed.

GOUT IN HOSPITALS.

By JOHN BEDDOE, M.D., LL.D., F.R.S., late Physician to the Royal Infirmary, Bristol.

It used to be said that gout was a very rare disease in hospitals, but such is no longer the case nowadays. Nor is it peculiar to the upper classes, nor unknown in Scotland; in fact the general statements made about it are almost all liable to more or less exception. I have known as many as four cases of gout to be lying at one time, not only in one hospital, but in one ward thereof.

Here is a typical and instructive case: T. D., mason, aged 52, a fine robust ruddy man, intelligent, and pleasant looking. "How have you been accustomed to live, D.?" "Oh! very well and very regular, sir! My missus always takes good care of me." "You are married then? Any children?" "No, sir! never had none." "What do you drink?" "Beer, sir; but not very much." "How much, and how often?" "Well, sir; half a pint or a pint at eleven o'clock, and a pint at dinner, and another pint at supper; nothing more."

Here was a respectable decent man, a good workman, and therefore always in full employment and earning good wages, which were spent in good feeding, plenty of meat, and just enough beer to help in the production of uric acid and waste products, but not enough to disorder his health in other ways or to diminish the keen appetite engendered by moderate labour in the open air, and stimulated by the cookery of a wife who had no children to divert her attention or her money from her husband. A little colchicum and alkali soon set this man on his feet; but more valuable, probably, was the advice he got to eat in the future less meat, and more milk and vegetables, and to limit his beer strictly to half a pint.

Presently we come to another case, in some respects almost identical with the former. This man exercises the healthiest of handicrafts; he is a gardener, aged 58, with the same good physique and sanguine complexion as the other man. He also has lived comfortably, and confesses to from two to three pints of beer daily; perhaps the actual quantity may have been a little more. He has had a yearly attack ever since his first one, which was 27 years ago. Sometimes they came in the winter, sometimes in the summer, and he has noticed that the summer attacks are the more severe and protracted. On the ordinary chemical theory, this is easily explicable; when the attack is postponed till summer the interval is longer and the accumulation of gouty poison is greater.

Long before Sir Alfred Garrod developed his theory of gout, a theory so beautifully simple that for years no one dared to raise an objection to it, experience had taught those who were most concerned, that the conjunction of excess in animal food with indulgence in liquors, especially beer and sweet wines, was most surely conducive to gout. And we shall do well if we remember this cardinal doctrine, notwithstanding the heretics among us who not unfrequently prescribe port wine to the gouty. On the whole red wines are more apt to excite paroxysms of the disease than white; thus Bordeaux occasionally and Burgundy very frequently disagrees, whereas Liebig boldly affirmed that along the Rhine, where wine indeed is drunk in plenty, but almost exclusively white wine, gout was in his time

practically unknown. This statement was, I dare say, too broadly positive; but certainly Rhenish wines in moderate quantity may generally be prescribed to the gouty with some confidence. Sir William Roberts seems to think that red wines exercise a slight retarding action on primary digestion, and that their superior wholesomeness as regards the nervous system is in some degree due to this fact, as the contained alcohol is more slowly absorbed, and produces a less sudden and marked stimulation and reaction. Be that as it may, it is pretty clear that the best regimen for the gouty is one that will promote the easy and perfect digestion of food, and the rapid and complete evacuation of waste products. Thus, "ἀριστον μὲν ἕδωρ"; but in the pretty numerous cases in which digestion does not go on well without the aid of a little stimulant, it is better to make the concession. The slight diuretic action which whiskey appears to exert, may have something to do with the beneficial influence with which it is credited.

But why should sugar, or at all events drinks qualified with sugar, prove specially pernicious? Sugar does not contain the materials necessary for the production of uric acid; no more, indeed, does alcohol. If, therefore, it be true that either of them alone, and yet more decidedly the two in conjunction, do favour the production or deposition of uric acid, it must be by their action, or that of results of their metamorphosis, on some

nitrogenous substance or substances. Again, why should sugar be so much blamed, while starch, which must perforce become sugar in the animal economy, escapes without censure? I may perhaps be permitted to make one or two suggestions, though I have not at present space to follow them up.

It may be that both alcohol and sugar act as gout producers by virtue (or vice) of their antitriptic character. Easily oxidisable, they may prevent or delay the action of oxygen on nitrogenous substances which are in course of breaking down; they may seduce, as it were, the oxygen from its duty, and may leave time and opportunity for the formation of pernicious products. And though starch really has to pass through a stage in which it exists as glucose, yet the metamorphosis is slow and gradual, and at no one time may the portal vessels be so much engorged as may be the case after a meal largely saccharine, and therefore rapidly absorbed.

The popular idea, however, is that sugar is injurious because, or when, it "turns acid" in the early stages of digestion—under the same conditions, in short, as those in which heartburn is produced. And this, dyspeptics tell us, is particularly apt to occur after the ingestion of a quantity of dilute saccharine fluid, but much less so where sugar has been a principal constituent of a solid meal.

MEDICAL PROGRESS.

RENAL AFFECTIONS.

Diet.—Perhaps the most prominent subject of discussion has been the diet and treatment of Bright's diseases. The reaction against a pure milk diet, especially in chronic disease, is shown in several recent utterances. Dr. Ralfe¹ read a carefully-guarded paper at the Medical Society, in which he showed—(1) that a pure milk diet in acute nephritis increased the quantity of urine, the amount of solids and urea, and decreased the albumen compared with what was excreted under other food; (2) that in chronic cases it produced a smaller increase of the urine, and even a decrease of the urea and other solids. If high tension was present it lessened the albumen, but if not, it had hardly any action in that respect. On the whole, he objected to its use except in acute cases and when he specially wished in chronic ones to reduce tension. Dr. Hale White agreed with this teaching, and said that albumen in most of the chronic patients in whom he had tested it had actually increased under such a diet, and though he did not consider albumen to be the really important factor, he feared the increased tendency to uræmia which was also noted in the same circumstances. His arguments for a mixed diet are given in the "Med. Chir. Trans.," Vol. LXXVI. The masterly paper contributed by Saundby² to the "Medical Annual" is a model of accurate thinking and clear epigrammatic expression. Albumen, he says, occurs in many other complaints, and its presence is in no way a measure of renal changes, even in Bright's disease. It is not evidence of a present inflammatory process, nor is its loss *per se* a serious drain to the system. Acute Bright's disease is curable, and the chronic forms may permit many years of fairly good health. The cardiovascular and

retinal changes, the patient's general state, and the possibility of removing the cause should be the basis of our prognosis.

Milk, with farinaceous matters, is the staple food for the acute forms. For the chronic, "eat very sparingly of butcher's meat, avoid malt liquors, spirits, and strong wines," is the chief rule. When uræmia threatens cut off all butcher's meat, and for stout persons restrict the amount of food. Beef tea should be avoided in all cases. In acute exacerbations we may fall back on milk diet for short spells.

The value of a milk diet for a month after the febrile state in scarlatina, but modified wherever it is not otherwise well borne by the patient, has been referred to in the section on fevers. Lacorché and Talamon³ condemn the indiscriminate use of milk alone in albuminuria; they point out that the adult requires seven pints daily to preserve the balance of tissue change, which is usually an impossible diet. Nor does a strict milk régime entirely remove albumen, but it is justifiable in acute nephritis and in acute exacerbations of chronic inflammatory disease, *i.e.*, when excessive diuresis is desired, and this régime should only be continued for a week or two. Dr. Dickinson⁴ also, in an interesting paper, objects to a purely milk diet, even in acute nephritis, where he gives in addition bouillon and watery drinks *ad lib.*, with farinaceous food. In chronic interstitial nephritis, instead of a purely milk diet, he insists on a moderate amount of meat and fish, with plenty of farinaceous food, milk, and large quantities of watery drinks. In every case alcohol must be reduced to a minimum. A warm climate, and very dry air are most important, and may give many years of health. For drugs he relies on the tartrates, citrates, digitalis, and saline purgatives, with occasional doses of calomel,