

Family history.—The influence of heredity upon pathological processes is both varied and occult. While in some instances we seem justified in assigning very great importance to it, in others its influence is wholly unrecognised, and between these two extremes we meet with all possible degrees of difference. It is, therefore, not a matter upon which it is possible to dogmatise or to write in a categorical manner, and it must suffice to indicate those constitutional states in the parents which are justly believed to influence disease or injuries in their offspring. Of these by far the most important is *Syphilis*. It admits of no doubt that the syphilitic taint may be inherited, but it is no less certain that all the children of syphilitic parents are not themselves the subjects of syphilis, and all degrees of intensity of the inherited taint are met with and can be recognised in practice. To ascertain that a patient is the subject of inherited syphilis is of the utmost importance; for not only may it at once determine the diagnosis, but it will exert a distinct influence upon the treatment, and in very many instances form the sole guide to the management of the case. The manifestations of acquired syphilis vary so much in kind and in intensity that it is quite impossible to state positively what does and what does not constitute a history of syphilis in the parents of an individual, and experience will alone enable the surgeon to determine upon what evidence such a conclusion may be allowed to rest. But this may be mentioned, that one objective sign of the disease observed by the surgeon is of more value than much unsupported evidence of the patient or his friends. As already mentioned, the discovery that a patient's parents were the subjects of constitutional syphilis before his birth does not of itself warrant the conclusion that he has himself inherited the diathesis, and in all such cases the supposition must be

corroborated by evidence derived from the history or condition of the patient before it can be accepted. It has been clearly proved that the syphilitic taint is most often and most intensely inherited soon after it has been acquired by the parents, and that with successive pregnancies the chance of inheritance and the intensity of the inherited taint diminish. It is, therefore, of importance to get evidence upon this point, and to learn, if possible, not only whether the parents were the subjects of syphilis, but also when, in reference to the birth of the patient in question, they acquired the taint, and whether the syphilitic dyscrasia was manifested in the products of the conceptions immediately preceding and following that in point. What is known as Colles' law, that the mother of a syphilitic infant is always herself the subject of syphilis, leads us to rely more upon evidence of syphilis in the mother than in the father. In investigating a family history for inherited syphilis, two errors may be made: the infection may be assumed on insufficient evidence, or we may fail to obtain the evidence of the taint which really exists. When it is remembered how mild some attacks of syphilis are, oftentimes how little there is to attract the patient's attention to his condition and to fix it in his memory, as well as how unobservant many patients are, it is not to be wondered at that years afterwards we fail to elicit an account of troubles long ago forgotten if ever noticed at all. Many of the characteristic effects of constitutional syphilis are simulated by other conditions. For example, a series of abortions is caused by local affections of the generative organs perhaps as often as by syphilis; repeated attacks of sore throat, and "ulcerated" sore throat, are as often simple follicular tonsillitis as specific pharyngitis; while it need hardly be pointed out that sores on the genital organs leaving behind depressed scars, are so often not syphilitic in

nature, or at least not Hunterian or infecting chancres, that no weight whatever is to be given to the history or objective evidence of such sores unless supported by other facts. In some cases even one fact will render the existence of syphilis in the parents beyond all doubt, such, for instance, as the discovery of a perforation of the palate; but in the majority of cases the most satisfactory evidence will consist of a series of facts in which the recognised course and progress of the malady can be traced: a single sore followed by multiple painless buboes, a papular rash over the trunk, sore throat, and perhaps mucous patches, and then, later on, sore tongue, periosteal pains and swellings and ulcerations, miscarriages, and other well-known syphilitic phenomena. The result of an examination may be given under one of four heads. Thus, in many instances we may be able to state positively, (1) that the patient's parents were the subjects of active constitutional syphilis at the time of his conception and birth; or (2) that the patient's parents were certainly not the subjects of active constitutional syphilis at the time of his conception and birth; but in many other cases, the evidence obtained will only warrant the statement (3) that the evidence is not sufficient to show that the patient inherited syphilis from his parents; or (4) that the evidence is not sufficient to show that he did not inherit syphilis.

Struma is another disease which is undoubtedly hereditary, although often acquired. Evidence of the existence of struma in a family is usually readily obtained from its characteristic effects. Phthisis, diseases of bones and joints, lupus, and lymphatic glandular enlargements, are too obvious, too chronic, and too serious in their results, to be overlooked or forgotten. A family history of *Gout* is not so easily obtained among the humbler as among the upper

classes of society, where the distinction between it and rheumatism is carefully drawn. Repeated attacks of inflammation in the joint of the great toe is the sign that we have chiefly to rely upon.

One of the hereditary affections most interesting and important to the surgeon is *Hæmophilia*, and where this exists in the family, evidence of it is usually readily obtained, as the repeated and often fatal hæmorrhages are facts which strongly impress the laity. It must be remembered that inquiry is to be mainly directed to the male members of the family, as it chiefly affects them, although it is transmitted through the females.

Cancer.—The heredity of cancer, including under that head all malignant tumours, is of much less importance than was at one time supposed. Occasionally we meet with striking examples of it, as in the family of a patient recently under my care for scirrhus of the breast (the patient had lost her mother, two maternal aunts, and at least two cousins on the mother's side, from cancer); or the well-known "Middlesex Hospital case," in which a woman and five of her daughters had cancer of the left breast. The absence of all hereditary influence is very frequently observed, and this factor will scarcely influence in any way the diagnosis of the nature of a tumour.

Personal history.—By this is meant the history of the patient previous to the occurrence of the affection presented for diagnosis. This is of importance in two ways, either as indicating the existence of some dyscrasia or constitutional taint, or as revealing some habit, practice, or occupation, rendering the patient liable to particular accidents or forms of disease. When the family history shows the existence of some heritable affection in the parents or brothers and sisters, inquiry should at once be made to ascertain

whether there is positive evidence of this dyscrasia having been transmitted to the patient. As already mentioned, when a history of syphilis has been made out in the parents, that alone is not a proof that the children are syphilitic, and evidence of the existence of this taint must be sought in the patients themselves. This holds true to some extent also in the case of the other heritable diseases we have mentioned, but there will be nothing to indicate the existence of the cancerous or gouty dyscrasia until the occurrence of a tumour or an attack of inflammation in the great toe, and this may be postponed for many years; but the other dyscrasias (syphilis, struma, and hæmophilia) manifest themselves much earlier. In reference to habits and occupations, mention may be made of kneeling, mining, working with phosphorus, mercury, or lead, the handling of hides or horses, alcoholism, exposure to wet and cold, occupations involving constant standing or contact with soot.

History of the affection.—This must be made out with great care and precision, and all dates accurately fixed, and stated in the days of the month (not of the week) when committed to writing. The earliest symptom noticed should be first recorded, and then inquiry should be made with a view of tracing out its cause, whether an injury of any kind (blow, fall, strain), over use, exposure to changes of temperature or to contagion of any kind, or the ingestion of food or medicine. The student must not accept the patient's view of the cause of his affection unless it commends itself to his own knowledge and judgment. Having obtained an account of the supposed origin of the affection, note carefully its exact course, and the order, mode, and time of development of any changes in it, together with the effects of any plan of treatment that may have been adopted. The bearing that these facts has upon

diagnosis varies much in different cases, and will have to be discussed in succeeding chapters; but we may here make a few brief general remarks upon the subject. And first, as of most moment, comes *the influence of injury* of every kind; this is most apparent in a large class of cases such as wounds, fractures, sprains, etc., which will be dealt with apart from so-called "diseases" in the earlier chapters of the book. But there are cases in which the influence of traumatism is less certain: first, because we do not know how far slight injuries may act as exciting causes of the growth of tumours or of some other diseases; and next, because such an injury may be merely the means of attracting the patient's attention to a pre-existing morbid state. For instance, a blow is often alleged to be the exciting cause of a tumour of the breast, when it may merely have led a patient to make an examination of the part and detect a lump, which, not being painful or protuberant, had previously escaped observation. The only way of avoiding this error is to ascertain as accurately as possible the succession of events and the relation as to time of the injury and any signs or symptoms of disease. The *mode of progress* of the disease may be an important factor in diagnosis; for while any disease may steadily advance, only certain forms are capable of spontaneous recession, or of an intermittent or remittent course. It is a marked characteristic of all forms of malignant growths that they continuously and generally rapidly increase; and while simple tumours may run a similar course, yet they not unfrequently remain stationary for an indefinite period, or recede. The mere duration of an affection may in the same way exclude some forms of disease, as, for instance, malignant growths and acute inflammation. The *sequence of symptoms* is sometimes of importance, as, for example, where renal colic is followed by signs of vesical calculus, or where