

that disease ; in others it may be acquired, and frequently results from lead or alcohol-poisoning, or takes its rise in pregnancy or scarlatina. In these cases of acquired poison the disease commences frequently in an acute form. Its tendency to become acute is in direct ratio to the acuteness of the poisoning. In yet other cases there is no distinct poisoning to be traced ; it would rather appear to result from forms of indigestion and mal-assimilation. These individuals often have certain characteristics when in health. The chief are as follows :—Habitual constipation ; some forms of dyspepsia ; often signs of imperfect circulation, such as cold hands and feet, not unfrequently palpitation, sometimes shortness of breath on exertion. Their skins are often thick, of velvet-like softness, and very white. These characters of the skin appear to me to be frequent, but by no means constant, signs of the diathesis ; Cullen's observation on the thick skin of gout is quoted by Sir Thomas Watson. The symptom of high pressure occurs very early in life ; I cannot say how early. I may note in passing that the pulse of a healthy child is of higher pressure, on account of better arterial tone, than that of the average adult. It exhibits what may be considered the normal standard of pressure, while the average adult pulse is below the normal standard, which is only seen in particularly healthy individuals, except in those of the high-pressure diathesis, in whom the pressure rises considerably beyond the normal.

Let it be clearly understood, the existence of this abnormally high pressure does not necessarily mean disease, but only a tendency towards disease. It is a *functional* condition, not necessarily a permanent one, though it is generally more or less so in these individuals. These persons appear to pass on through life pretty much as others do, and generally do not suffer from their high pressure except in their petty ailments upon which it imprints itself ; these mostly belong to one type, and are generally very greatly relieved by a purge and a little dieting. In other words, their arterial pressure rises at these periods and calls for treatment. After these little attacks their pressure often falls and remains low for a time ; gradually, however, it again commences

to rise, attains too great a height, and they have another breakdown. These breakdowns may be of more or less severity and frequency, according as the diathesis is more or less strongly marked ; perhaps they consist of only a little "out-of-sortishness," sometimes severe headaches, often hemicranial, menorrhagias in females, epistaxis in males, temporary albuminurias or hæmatinurias, palpitations, breathlessness, sleeplessness, or the reverse, loss of memory, various neurosal or mental disorders, severe dyspepsias, constipation, or some such troubles ; if more severe they may take the form of an attack of Bright's disease, or of an attack of bronchitis. But the attack passes off, and things continue much as before. As age advances the enemy gains accessions of strength ; perhaps the mode of life assists him—good living and alcoholic beverages make good his position, or head work, mental anxiety, hurried meals, constant excitement, inappropriate or badly cooked food, or any other of the common but undesirable circumstances of everyday life, tend to intensify the existing condition, or, if not previously present, perhaps to produce it. Now under this greatly increased arterial pressure, hearts begin to hypertrophy and arteries to thicken ; what has previously been a functional condition tends to become more of the nature of an organic one. Breakdowns are now more dangerous, they happen much as before, but more serious ones begin to appear. The individual has now passed forty, perhaps fifty years of age ; his lungs begin to degenerate and become emphysematous ; he has a cough in the winter time, and gradually drops into a condition of chronic bronchitis ; his right heart dilates, and his condition becomes more or less mixed in the aspect it presents to us ; but by his pulse you will know him. Or again his symptoms take another line : his heart fails him, it can no longer perform the high pressure work demanded of it, it therefore fails and dilates ; the individual falls into a bad way ; a mitral murmur appears ; his pulse becomes weak and irregular, though still *persistent*, and so he will remain till he dies or is relieved by a timely reduction of pressure, which allows his heart to recover, and sets him on his legs again.