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A CASE OF HODGKIN'S DISEASE IN A CHILD.

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IN presenting for consideration a case of so-called Hodgkin's disease, I am well aware that the subject has been made one for assiduous study by men profoundly learned in the medical science.

But since, in spite of their most earnest investigations, they have left so much in connection with this disease, and with those allied to it, undecided, I cannot think it presumptuous to enter the wide field still unexplored.

In reference to disease conditions affecting the lymphatic system, it is to be said that limitations of them can be more or less defined in the vessels or glands, as the case may be. But it cannot be easily supposed that when the one is at all seriously diseased, the other will absolutely escape involvement in the morbid process. Any conclusion to this effect would be manifestly incorrect. Especially so if the vessel be primarily affected. For just as its lymph-stream normally flows unerringly onward to the nearest gland, so also proceeds any inflammatory or other active pathological condition existing in it, to the same destination. It is quite certain, however, that a relatively greater degree of morbid action may occur within the gland structure without extending beyond it and into the substance of the vessels. This is somewhat satisfactorily demonstrable in lymphadenosis, in which the glands reach great proportions under the conditions governing the disease, while the vessels connected with them have been only in a few instances found affected. In other examples, in which they have not been found or injected at all, instead of the assumption that they were destroyed by the action of the disease, it might as well have been inferred that they had remained during life in a perfectly healthy state, but that unskilfulness, or post-mortem changes, had made it impracticable to expose them to view

The anatomical structure of the glands no doubt goes far towards accounting for the power they possess of confining within their own recesses the morbid process which is going on; though the physiological purpose they are said to naturally subserve of acting as so many reservoir-like laboratories in connection with the hæmatogenetic function possibly affords even a readier explanation of it.

The relationship existing between the lymphatic glands and the spleen, as evinced by a striking similarity in structure, and probably by a corresponding physiological action in respect to the blood, has been considered sufficiently close to warrant, in the opinion of some, the belief that they belong to one and the same system, the spleen simply exhibiting, in a natural condition of things, the example of a remarkably developed lymphatic or mesenteric gland.

It is only necessery in this connection to make passing allusion to the frequency with which these organs are together found implicated in various diseases. My own conviction is, that, so far as the matter of function is concerned, they are practically identical with each other, only differing therein, it may be, in degree of activity.

However responsive one division of the lymphatic system may be to another in disease, the task has not been left neglected of assigning to each particular types of morbid phenomena. For though, as I have said, any serious affection of one portion must assuredly, in greater or less degree, according to circumstances, become extended to another, a principal site of disease often enough exists to claim especial attention, and for the disease itself to merit a distinctive appellation in nosological tables.

In discussing lymphadenosis, any reference but the most casual and hypothetical need not be made to the lymphatic vessels, as they probably at most act simply as so many conduits through which the exciting cause of the disease is in some measure conveyed. Seldom or never are they found, for example, approximating any of the states such as our distinguished ex-president, Dr. Samuel C. Busey, has so fully described in his invaluable work on "Congenital Occlusion and Dilatation of the Lymph Channels," or as other authors have treated of.

The almost exact resemblance, in many essential particulars, which obtains between typical leucocythemia and lymphadenosis makes it appear an arbitrary ruling by which they are generally

accepted as independent diseases. In etiology and pathology, in their symptoms, progress, and termination, there can only be the smallest, if any, distinction drawn between them. And it is my firm belief that did they occur more often than ordinarily, thereby increasing anxiety and attracting a greater amount of attention, the same reasonable difference of opinion regarding their duality would prevail that now relates to the question at to whether membranous croup and diphtheria are different affections.

When the spleen is primarily enlarged, the glands, in case they are secondarily involved are, with few exceptions, inconsiderably increased in size, and thus, in one of its aspects, leucocythemia is said to exist. On the other hand, when the glands are first affected, the spleen, if at all, is, as a rule, less evidently so, and lymphadenosis, in like manner, becomes established. To suit the occasion, as it were, in those cases in which the one condition advances perceptibly into the other, until finally they become merged, or in which both affections are simultaneously developed or associated in a variety of other ways, the device of forming out of them so many subdivisions of leucocythemia is resorted to by the defenders of the faith in the existence of more than one disease.

It would really appear as if at different times one or the other, the glands, spleen, or medulla of the bones, perhaps became most susceptible to the morbific influence exerted, and produced in its respective way different manifestations of one and the same disease.

The considerable and permanent excess of leucocytes, which is characteristic of leucocythemia, no doubt depends upon the condition of the spleen. If the spleen enlarges in the course of Hodgkin's disease, the same preponderance of white corpuscles may be observed; the amount of their excess, over and above the normal, principally depending upon the extent of splenic enlargement.

The fatality accompanying so-styled Hodgkin's disease has not by any method of treatment yet applied been averted, except, perhaps, in a small percentage of cases. The developmental period of life is no more exempt from it than the degenerative period. And no explanation is given of the fact as to why males are numbered more largely among its victims than females. Its predisposing and exciting causes are at best im-

perfectly known, and its commencement is generally so insidious as to escape all recognition.

To what extent the production of the disease may be found hereafter attributable to the presence of a particular form of low vegetable organism can but be conjectured at the present time, and the same is true as to whether it may not be discovered to have a parasitical source of origin, of the nature found in cases of elephantiasis arabum—a disease chiefly involving the lymph channels, and which in tropical countries reveals as one cause of its appearance the parasite *filaria sanguinis hominis*.

The history of the case which I now have the pleasure of recording presents a little of interest, beyond the ordinary run of features.

Alice P., æt. 11 years; mother died eight or nine years ago of phthisis pulmonalis; father still living, but very dissipated.

Her condition attracted no particular attention until towards the latter part of the month of February, 1885, when she complained of sore throat and malaise. On examination, the pharynx was observed to be congested, and the left tonsil somewhat enlarged and inflamed, the right one less so; the submaxillary lymphatic glands were increased in size, more especially below angle of jaw on left side.

Submitted to treatment at my hands the following March, and expressed herself then, as she does now upon inquiry, as feeling generally very well. The thermometer, however, displayed a slight rise of temperature, and she was pale and evidently anemic, but withal bright and cheerful in spirits. The glands were now very prominent on left side of neck, and in the right axilla they were also found considerably enlarged, but nowhere else were they apparently different from the normal. The spleen *was* somewhat enlarged. A scaly rash covered the back.

In consultation with Dr. George Byrd Harrison, the diagnosis of Hodgkin's disease was at once agreed upon, and she was forthwith given Fowler's solution, combined with the bitter wine of iron, to be taken three times a day. The propriety of extirpating the worst affected glands in the neck was briefly discussed and decided in the negative, on account of the evidence presented of widely-spread disease. Later on the diagnosis was concurred in by Dr. Charles E. Hagner, who also approved of the treatment adopted.

Meanwhile, the administration of the remedies has been persevered in without interruption; her diet has been a palatable and nutritious one, and in all respects her hygienic management has been unexceptionable.

The result is, that her general condition has greatly improved, but the glands, while perceptibly reduced in size, still present to

view threatening proportions. The rash disappeared, after taking the medicine, in a short time. The urine has been tested once only, and was then proven to be free from albumin. The initial examination made of the blood revealed a marked increase of the white corpuscles, but each subsequent one has shown a steady diminution in their number, until now they apparently do not exceed the normal ratio. The red blood-corpuscles present a crenated appearance, but do not seem to have undergone any numerical change.

An interesting question is, what effect might the supervention of a first menstruation have upon the progress of the malady? It is known that a greater susceptibility to *leucocythemia* is created by the natural cessation of the function.

Admitting, if only for the sake of argument, that the two diseases are really identical, and that the vital forces, under the circumstances attending the initiation and termination of the menstrual function, exert quite opposite influences in the economy, it would appear that the susceptibility to the disease attaching to the one period of life would not be evinced so strongly at the other, and that, indeed, a remedial effect would accompany the puberal flow of the menses.

In conclusion, I will venture to formulate the following propositions:

1. That leucocythemia and lymphadenosis are different names for the same disease.

2. That this (single) disease may, and does often, appear in modified forms.

3. That inasmuch as it remains undecided whether this disease is primarily local or general, it may on that account, if none other, be, for the present at least, relegated to the same category with carcinoma.