

# A Review of Hodgkins Disease

From a Study of Recent Clinical Data.

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**P**ERSONAL interest in a Hodgkin's case, and a curiosity to find if recent medical advances gave any hope of escaping the inevitable doom imposed by this disease, is responsible for the following article. If it gives someone a fuller knowledge of symptoms and hence the ability to make clearer diagnosis and thus helps to prolong some life yet a few years—then the labor shall not have been in vain.

The nature and cause of Hodgkin's disease are still poorly defined. Some would lean towards the infective nature of the condition, and place it with Syphilis and Tuberculosis and the granulomata, but its neoplastic characteristics are quite pronounced and hence tend to link it with cancer and the leukaemias. Others suggest an initial inflammatory stage followed by a neoplastic condition.

The positive diagnosis depends on the pathohistological examination of the infected tissues, which may be the lymphoid tissue of any part of the body. A characteristic yet variable picture is seen. Large irregular giant cells (Dorothy Reed), polymorphonuclears, and perhaps a large number of eosinophiles, and many or few lymphocytes, is the pleomorphic, cellular picture presented. This differentiates it sharply from the sarcomas and leukaemias with their uniform, cellular appearance.

In a study of the recent literature on this subject, only one instance was found where claims were made regarding cures. This comes from Guy's Hospital, London, and merits consideration. From a review of sixty-five cases treated there, and an analysis of two hundred and twelve cases under observation in Bellevue Hospital and the New York City Cancer Institute, the following deductions and suggested treatments are presented.

Hodgkin's Disease is no respecter of race or nationality. Age incidence shows well over 50 per cent of cases in the third and fourth decades, with an extreme range of four and a half months to seventy-six years. The infant case is of interest inasmuch as the mother showed evidence of Hodgkins Disease in the last month of pregnancy. Females showed their usual disease advantage over the male by constituting only 35 per cent of the cases.

In 80 per cent of the cases the initial symptom was lymph node enlargement, and the lymph areas involved, in order of frequency were: cervical, supraclavicular, axillary, and inguinal. Unilateral cases predominated. Cough and dyspnoea were early signs in roughly 10 per cent of cases. In about 5 per cent skin disorder sent the patient to his physician. This is a very useful sign; a skin condition that does not yield to usual methods of treatment should arouse suspicion. In 38 per cent of the cases some cutaneous manifestation developed and presented itself

under various cloaks,—simple pruritus, exfoliative dermatitis, scabies-like papules, eczematous lesions, herpes zoster, and boils.

The blood picture is neither characteristic nor constant, which is rather striking in a disease so intimately associated with the circulatory system. A leucocytosis is of a more frequent occurrence than a leucopenia. Some 15-20 per cent of cases showed an eosinophilia. A simple anaemia was evident in a quarter of the cases, and became more marked as the disease advanced. A diminution of lymphocytes, and an increase in monocytes is fairly constant.

Fever may or may not be present, and when it is, there invariably seems to be an involvement of the deeper glands and structures. Therefore it would seem that fever, as a symptom, is a definitely bad prognostic sign. The Pel-Ebstein variety of temperature is found but to what extent there does not seem to be agreement. London reports 60 per cent, and New York, uncommon. Here the temperature gradually rises to 103 degrees over a period of from three to five days, and as gradually declines. This cycle is repeated at intervals of about ten days. A more common type of pyrexia would seem to be the low grade, continuous variety, where the temperature rises to 100-101 degrees each evening, and to higher levels as the disease progresses. The pulse curve seems to be proportionately higher than the temperature curve.

The neurological development of the disease is interesting. In about 5 per cent of cases a paraplegia occurred, and is explained as being due to the lymphogranulomatous process extending via the lymphatics of the nerve roots to the cord and producing myelopathy, as a result of compression or lack of nutrition. Thoracic lesions of the cord are four times as common as lumbar lesions, owing to the more frequent involvement of the thoracic glands.

Osseous involvement occurred, but to what extent was hard to decide. The more frequent areas of involvement were in the order named—vertebral column, pelvis, ribs, proximal end of femur, and sternum. It is interesting to note that the bones involved are closely connected with the hemopoietic sites of the body.

Other areas of involvement included lungs, liver, spleen, ileum, cerebrum, and the blood.

Etiology of the disease is rather a conjectural field. Tuberculosis for long received considerable blame, but in the cases examined the association of the two diseases was uncommon, and certainly of no etiological importance. Environment, occupation, food, and previous disease were not predisposing factors. A familial history of Hodgkin's disease was not found. Four cases had histories of recent trauma to the involved area. This scanty evidence would seem to bolster up the irritative and neoplastic nature of the disease.

The expectancy of life after the onset of the disease is in no wise lengthy. Without treatment eighteen months seems to be the allotted span, while those who come under proper medical supervision may hope for three to six years in which to make the final adjustment.

Treatment is not very successful. A little lengthening of the earthly hours in nearly all cases is the sole reward of the most careful therapeutic efforts.

From the Radium Institute of Santiago comes a report of very effective treatment by means of small amounts of radium. One hundred and sixty mg. of radium, 4 cm. from the skin was applied to the cervical region, and resulted in marked diminution of the enlarged glands in the neck, and surprisingly, the nodes in the chest were markedly reduced by the treatment to the neck, and yielded entirely to further radium therapy as was shown by roentgenogram.

Irradiation remains as the only effective treatment, and in all cases should be applied. For, however bad the condition, the patient can apparently be dragged back from the brink of the grave, provided the proper doses are applied, at proper intervals of time, to the proper location. However, no hard and fast rules are laid down as to the method to be used. This is more a matter for individuals treating specific cases to decide. The general practice is to use a fairly small dose at a time, not over 100 or 200 roentgens. Larger doses up to 500 roentgens have been used with satisfactory results. Transfusion will enable patients to withstand further irradiation. Total body irradiation has also been suggested.

The Guy's Hospital report tells of four cases treated by excision of the glands affected, and subsequent deep X-ray therapy. Three of these cases apparently had the disease localized superficially. All trace was lost of one of these after the patient had left the hospital apparently cured. Two others are alive and well ten and twelve years after operation and treatment. All were histologically proven cases of Hodgkin's disease. These cases are of the utmost importance for no other cases have recovered. To quote from the article—"We therefore urge that all patients with Hodgkin's disease, in whom there is apparent limitation of the disease to the superficial glands in whom there is no evidence of abdominal or splenic involvement, and in whom radiography shows no abnormality of the chest, should be subjected to surgical removal of the diseased tissue, and should subsequently receive deep X-ray therapy. The fact that fever is unusual when the disease is so limited may assist in selecting the cases for operation."

To pursue the subject further at present is useless. When cancer in all its manifestations has yielded to the advance of Medical Science, then it may be that Hodgkin's disease also shall be forced to release humanity from its devitalizing tentacles.

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