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Summary of Papers Delivered at the Conference on Staging in Hodgkin's Disease (Ann Arbor)

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All of us who have taken part in this Conference are most grateful to the American Cancer Society, the University of Michigan, and the Program Committee for having made it possible, as well as to Dr. Peters for giving us such a good start.

This type of meeting, where a few people from different disciplines gather together to discuss a particular topic in which they are all expert, seems to me to be of exceptional value. It is intellectually stimulating for those who attend and has an international influence, out of all proportion to its size, on progress both in the understanding of the problems concerned and in improving clinical practice. In my view, progress in cancer treatment is developing steadily as the result of many advances on narrow fronts and is most unlikely to flow from any sudden major breakthrough relating to the cancer process as a whole. To me, meetings like this give far better value than most of those vast international conferences. Meetings of this size and informality provide the added advantage that we are able to disagree without fear of rancor or misunderstanding, which is so important since it is from disagreement that progress flows. If we were all in agreement, there would be no need for us to meet.

This Conference started with a discussion on the value of symptoms and laboratory tests in assessing prognosis or anticipating recurrence. In a way, laboratory indicators are still a disappointment because, although a great deal of interesting work has been presented, it seems, thus far at least, to be relatively unimportant. With regard to general symptoms, it was agreed that pruritus did not have the same grave significance as fever and sweating and should therefore be taken out of the "B" classification. It was also agreed that loss of weight had a greater significance than had been appreciated at the time of the Rye Conference and that this should now be put into the "B" classification. Dr. Tubiana's and Dr. Boiron's work on the independent significance of general symptoms and of laboratory tests added welcome clarity to what had been a confused situation.

The discussion on lymphangiograms confirmed our view of the importance of lymphangiographic investigation without adding much that was new, but it did serve to emphasize that this is a dynamic examination which can give a great deal more information through observation of lymph node behavior over a period of time than may be derived from a single film. Some disappointment was expressed with the usefulness of bone, liver, and spleen scanning as indicators of tumor involvement, but a new interest in radioactive isotope scanning has arisen from the use of gallium 67, which appears to localize well in Hodgkin's disease and so seems to be of value not only as an indicator of involvement, but perhaps also as a method of obtaining a reliable negative report in some cases of doubtful recurrence. It is clear that a good deal more work on gallium scanning in Hodgkin's disease will now be done, and it will be most interesting to see the results of its use at the next Conference.

This time we have naturally had much talk about exploratory laparotomy, splenectomy, and bone marrow biopsy. A great deal of evidence, most of it from Stanford University through the work of Dr. Kaplan and Dr. Rosenberg, has become available, and the value of these procedures in investigation and, indeed, in treatment has been clearly brought to light. There was little argument about the value of laparotomy, except in regard to the question of whether there is a definable low-risk group in which splenectomy may be unjustified. Two points have been stressed, namely, that small spleens may unexpectedly be found to be involved by tumor and that large, readily palpable spleens may be clear of disease or, in other words, that we have no reliable clinical method of detecting splenic involvement. Bone marrow biopsy has been shown to be of interest since a low but important percentage of patients coming to laparotomy have been found to have bone marrow involvement. The significance of this finding and, more importantly, the frequent discovery of spleen involvement for those patients who previously appeared to have localized disease, is now well recognized. The success of continued, spaced, quadruple chemotherapy has made it even more important to detect distant spread as soon as possible.

The pathological discussion confirmed the value in clinical management of the decisions taken at the Rye Conference, though the pathologists themselves still prefer the more detailed classification originally proposed by Dr. Lukes and Dr. Butler. Useful time was spent in defining more clearly the criteria for placing lymph nodes in each group and for clarifying the definition of the cellular phase of nodular sclerosis. The discussions around new data on the relationship of histology to survival, stage, and site were particularly interesting. Another important matter was clarified, *i.e.*, that progression occurs from the less to the more malignant varieties of Hodgkin's disease but that lymph nodes removed at any one time, nevertheless, tend to be of the same histological type. This consistency is most marked with the nodular sclerosis grade, as Dr. Rappaport reminded us. He has also shown that a few patients, apparently cured of the disease for many years, may have lymph nodes showing that nodular sclerosis is still present postmortem. Such patients appear to have been able to control progression and so come to terms

with this disease in the nodular sclerosis grade. This concept of Hodgkin's disease as a progressively malignant disorder with a tendency in some patients to arrest in the nodular sclerosis grade needs further study since, if true, it is of great importance to a wider understanding of this disorder.

The modes of spread of Hodgkin's disease once more brought out a lively controversy, which was not resolved. However, agreement was readily reached about the significance of extranodal disease, and it was particularly seen that the definition used in the Rye classification regarding extralymphatic involvement needed revision. Direct extension from a lymph node into the surrounding tissues does not carry the same grave prognosis as do true metastatic lesions.

The therapeutic discussion was most cheerful because of the marked success now regularly achieved with this disease. Cure was freely talked about and the dramatic improvement in survival was clearly demonstrated. This improvement has been due not only to wide-field, supervoltage radiotherapy, but also to chemotherapy, particularly through the use of quadruple, spaced drug treatment initiated and so well presented by Dr. Carbone and Dr. DeVita.

The discussion on epidemiological factors, while interesting, did not resolve the question of whether the designation Hodgkin's disease may cover more than 1 entity or whether it represents a single, progressive disease resulting from similar responses to varying inciting agents complicated by host resistance which varies with age and sex. Interesting data were presented about the relationship of histology to age and about variations in incidence between one country and another.

The main business of our Conference has been satisfactorily resolved by the presentations of the reports of the Committees on Staging Procedures, Staging Classification, and Histopathological Criteria Contributing to Staging, and these now appear as recommendations.

In this Conference, emphasis was placed on a confident reaffirmation of the neoplastic nature of Hodgkin's disease, on the value of the histological classification accepted at the Rye Conference, on a better appreciation of the significance of some symptoms and some site involvements, on the great forward strides that have been made in investigation through lymphography and splenectomy, and on the success of treatment through extended-field, supervoltage irradiation, and quadruple, spaced chemotherapy.

It was a valuable and most cheerful meeting, being packed with interesting new data and having a great success story to report. The staging recommendations will, I hope, gain general acceptance.