MEDICAL USES OF RADIUM

Priby Council

MEDICAL RESEARCH COUNCIL

MEDICAL USES OF RADIUM

Summary of Reports from Research Centres for 1932



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PREFACE

This report summarizes the results of research work done during 1932 in the treatment of cancer by means of radium lent by the Medical Research Council to selected centres throughout the country. It thus continues the account given in the ten similar reports already published (Nos. 62, 90, 102, 112, 116, 126, 144, 150, 160, and 174 in this Series). The scheme of work is under the direction of the Radiology Committee, to whom the Council are indebted for the preparation of these reports.

The original stock of radium salt entrusted to the Council for this purpose by H.M. Government is supplemented by further quantities provided by the British Empire Cancer Campaign and by the National Radium Commission. Support has also again been given by the Campaign to the Radon Centre maintained by the Council at the Middlesex Hospital for the supply of radium emanation. The Council would here once more express their high appreciation of the continued co-operation of these bodies.

The report not only deals with the actual work of the past year, but also gives statistical data relating to the after-histories of patients treated in earlier years. It contains, further, a section in which some account of purely experimental investigations is presented.

MEDICAL RESEARCH COUNCIL, 38 Old Queen Street, Westminster, S.W. 1.

27th July, 1938.

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INTRODUCTION

The presentation of the subject-matter of the present report follows the lines of previous issues. The general balance of these reports must inevitably shift as knowledge of the subject advances. Earlier reports in this series were largely concerned with details of new developments in radio-therapeutic technique, but the stage is now reached where there is less of this information from the centres, for there are few sites of the body liable to the incidence of malignant disease which have not already been studied from this point of view. On the other hand, the statistical information has gained in value, as it now covers a large enough number of years to provide data from which conclusions can be drawn with some certainty.

More experimental work in radiology is done in physical, biological, and pathological laboratories at the present time than ever before. This has been a gradual growth at many of the research centres, but of late years there have been several additions to these, and the general experimental facilities for research into the nature of the actions of radium upon normal and malignant structures of the body have received a great stimulus by the allocation of radium from the Radium Commission to the Council for work of this character.

The treatment of carcinoma of the rectum by irradiation has till lately been disappointing, but there are now indications that, with greater experience and better understanding of the dosage, the future holds out a more favourable prospect. It is, therefore, of the utmost importance that new radium methods of treatment should be explored, for it points to the fact that although for many years these growths have been looked upon as hopeless or as radio-resistant, some have