

FACTORS INFLUENCE ON DOSE CALCULATION

IN

THE SPLIT FIELD TECHNIQUE

BY

TWEESAK REAMSIRI



A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

(MEDICAL PHYSICS)

IN THE

FACULTY OF GRADUATE STUDIES

OF

MAHIDOL UNIVERSITY

1982

13251

๖๖๖๖๖๖ มหาวิทยาลัยมหิดล ม.มหิดล
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ABSTRACT

Radiotherapy has now become an acceptable means of successful treatment of two most incidental cancer cases in Thailand, i.e. Ca. Nasopharynx and Ca. Cervix.

The most popular device applied by Co-60 is the symmetrical Split Field Technique which is brought about by shielding of the midline of the irradiated area, thus dividing the treatment surface into two equal parts.

In this study, attempts were made to find the most suitable field for the calculation of various pertinent factors in order to determine the exact treatment time that would produce optimum therapeutic effects.

In the application of fixed field radiotherapy by using symmetrical split field technique, the factors for the direction of treatment time are mainly: Correction Factor for Field Size, Backscatter Factor and Percentage Depth Dose.

And the criteria for the choice of the most suitable area to be used for calculation of these three factors, referred to in the preceding paragraph, so that the symmetrical split field technique could be applied for the best healing results are none other than statistical returns from various experiments.