



Service Priorities and Programmes Electronic Presentations

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Prone Breast Irradiation Experience in QEH

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Introduction

It has been noted that breast cancer patients with large pendulous breast often experience increased skin reactions in the infra-mammary fold. Besides, undesired lung volume will be included in the treatment area which may be clinically unacceptable. Therefore, at QEH, we have initiated the use of prone breast board as an alternative to conventional treatment in the supine position. The purpose of this study is to share our experience on prone breast irradiation at Queen Elizabeth Hospital.

We compared the mean lung and heart doses between supine and prone position of early breast cancer patients undergoing postoperative whole breast irradiation

Objectives

To compare the mean lung and heart doses between supine and prone position for pendulous breast patient. To find out any advantages/disadvantages between these treatments techniques based on our experience.

Methodology

Since 2013, we have treated 14 breast cancer patients using the prone breast board (CIVCO Horizon). Our selection criteria include large pendulous breast that do not require regional node treatment and for patients with a lateral breast fold that extends more than half of the mid-axillary line when lying supine.

We compared the mean lung V20 dose and heart V15 dose between both supine and prone breast treatment plans.

Result

Dose volume histograms were generated to compare lung and heart dose between both supine and prone treatment plans. Results showed prone breast irradiation has led to a decrease in mean lung dose compared to supine position in women with pendulous breast. The difference in the heart dose between supine and prone position remain insignificant. Prone breast irradiation seems to be more advantageous for reducing lung dose and has no adverse effect on heart dose.