

Introduction

Breast cancer is the most common cancer and leading cause of cancer deaths among women worldwide. In 2000, breast cancer resulted in an estimated 189,000 deaths in developed countries and 184,000 deaths in developing countries, accounting for 16 and 12 percent, respectively, of all cancer deaths in women **(Ferlay et al., 2000)**.

Adjuvant radiotherapy is administered to those patients who have undergone breast-conserving therapy and post mastectomy patients with primary tumors greater than 5 cm or more and four positive lymph nodes. Post mastectomy patients with less advanced disease may also be candidates for adjuvant radiotherapy, as two clinical trials have demonstrated a survival advantage for post mastectomy radiotherapy, although confirmatory trials are awaited **(Overgaard et al., 1999)**.

Radiation therapy to the chest has been shown to have cardiotoxic effects. As an increasing number of women survive breast cancer, the impact of cancer treatment on cardiovascular health is becoming ever more important. Since the early detection and treatment of cardiotoxicity can reduce its clinical effects, it is particularly important that oncologists must be aware of these side-effects and manage them appropriately **(Bird and Swain, 2008)**.

At present , there is a controversy as to whether modern radiotherapy techniques are also cardiotoxic, especially in cases of left breast cancer (**Kyriaki et al., 2008**).