Effectiveness of Radiotherapy in Heterotopic Ossification

Published On: December 30, 2015 | Pages: 029 - 032

Author(s): Yasemin Benderli Cihan* and Alaettin Arslan

Objective: Heterotopic ossification (HO) is a biological process characterized by de novo bone formation in tissues which should not undergo ossification in normal condition. Frequently, it is a complication that occurs after head injuries, spinal cord injuries, cerebrovascular events, burns, fractures, dislocations and joint replacements. ...
Various techniques are used in image-guided radiotherapy (IGRT). Cone beam computed tomography (CBCT) is widely used in IGRT on linear accelerators. The increased accuracy of IGRT enables reducing planning target volume margins and doses to normal tissues. However, for radiation therapies requiring fractionated irradiation, increased exposure dos ...

Direct and Bystander Effect on Cervix Cancer Cells (SiHa) Exposed to High Dose-Rate Gamma Radiation Sourced from Ir 192 Used in Brachytherapy

Introduction: Brachytherapy is a preferred choice of radiotherapy in the treatment of sensitive tissues cancer like intestine and gonad. The treatment is expensive because of the frequent replacement of radionuclide sources. A better understanding of cell killing and the cellular responses at different dose rates, might aid in tumor cell ...

CT Scanner Based Virtual Simulation of Radiotherapy Treatment by the PICTOR 3D® System Does not Increase Efficacy in Daily Routine Radiation Therapy

Abstract Exact reproduction of patient position is crucial in radiotherapy. We evaluated the reproducibility of a CT based treatment simulation with the PICTOR 3D®system (LAP, Lüneburg, Germany) and examined its influence on workflow in daily routine. ...
Percutaneous Spine Biopsy: A Literature Review

Percutaneous spine biopsy has widely replaced open biopsy during the last 50 years. Closed biopsy is more cost effective, less invasive, and has fewer complications than open procedures. A literature search was conducted in PubMed for percutaneous spine biopsy. The contributing factors to the success of the biopsy were identified by reviewing the articles and th ...

Premature Ovarian Failure in a Patient with Robertsonian Translocation Rob (14;15): Is it only a Coincidence?

Women have fixed ovarian follicles after birth and the number of the follicles declines with age. The decrease can be regulated by genetic, hormonal and/or therapy procedures. Radiation exposure can lead to premature ovarian failure (POF). POF is defined as interruption of the ovarian function in an adolescent woman. ...

Where We are Standing in the Choice of Most Effective Radiological Imaging for Patient's Benefits?
Today the radiologic investigations are the indispensable diagnostic tools in medical care especially in emergency, oncology and pediatry departments. The imaging has the benefits for the patients follow-up as well as the diagnostic significance. ...