

**B C R
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**3rd BALKAN CONGRESS
OF RADIOLOGY**

Ohrid - Macedonia

October 8 - 11, 2004

Program

Abstract book

**Balkan Society of Radiology
www.balkanradiology.org**

sions are increased, the skin dose and the dose in build-up regions also increased. This increased in dose is due to increased electron emission from the collimator and air.

The results show that the skin sparing is significantly reduced for large field sizes.

Conclusion: By measuring the doses in build-up region, we can ease supply more accurate information to the oncologist on the radiation doses delivered to the skin and subcutaneous tissues in radiotherapy by various beam types.

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SPIRAL COMPUTED TOMOGRAPHY IN CONTROL OF EFFECTIVENESS OF PERCUTANEOUS VERTEBROPLASTY IN AGGRESSIVE SPINE HEMANGIOMAS

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The results of percutaneous transpedicular vertebroplasty (PV) for aggressive vertebral hemangiomas have been evaluated in 25 cases (17 cases of cavernous types and 8 cases capillary-cavernous ones) by means of spiral computed tomography at preoperative and postoperative periods.

Clinically all the patients suffered from severe back pain.

When performing spiral computed tomography we detected that the hemangiomas had soft-tissue epidural tumor with spinal cord compression in two cases. 19 patients had hemangiomas with affection of more than 50 % of a vertebral body and patients had hemangiomas with affection of more than 30 % of it.

Using postoperative computed tomography guidance we detected the hemangiomas to be completely filled with bone cement in 14 cases and to be partially filled (more

than 90%) with bone cement in 11 cases. One patient was detected to have paravertebral cement filling/ Clinically after the performed open treatment a complete pain relief was revealed in 19 cases and a partial pain relief (1 score on Pain Score Scale) in 6 cases. We did not detect any leak or other complication.

CONCLUSION.

Detection of aggressive spine hemangiomas as well as postoperative controlling of percutaneous vertebroplasty as one of the most effective surgical methods of treatment, we recommended to be performed by means of Spiral computed tomography

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COMPUTED TOMOGRAPHY OF THE LUNG IN WEGENER'S GRANULOMATOSIS

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Introduction: Wegener's granulomatosis is a multisystem disease with variable clinical expression. In its full-blown state it is characterized pathologically by necrotizing granulomatous inflammation of the upper and lower respiratory tracts, glomerulonephritis, and necrotizing vasculitis most commonly of the lungs and other organs or tissues. Thoracic symptoms consist most often of cough, hemoptysis, dyspnea and pleuritic pain. Pulmonary involvement occurs at some stage of the disease process in almost all patients and chest radiography is necessary to be obtained like first radiological investigation.

The aim of the study is to show the role of CT (HRCT) in assessing the presence and extent of pulmonary manifestations in patients with Wegener's granulomatosis.

MATERIALS AND METHODS:

In this study in a period of 1 year we included 15 patients with Wegener's granulomatosis which had pulmonary abnormalities on the initial chest radiographs.

The age range was from 26 to 46 years, and 11 of them were female. Every patient was underwent on native chest radiograph and CT scanning (HRCT).

RESULTS:

Native chest radiographs:

Native chest radiographs showed in 9 patients multiple pulmonary nodules or masses, with cavitations in 4 of them.

Signs of air-space consolidation we have found in 4 patients.

We have found pleural effusion in 3 patients.

CT FINDINGS:

In 9 patients we found multiple pulmonary nodules or masses. In 4 of them we could characterized cavitations with thick walls and irregular margins.

6 cases were with air-space consolidation: 4 of them with massive pulmonary bilateral hemorrhage, and the other 2 were represented with patchy areas of ground-glass attenuation. We found small nodular calcifications in 1 patient.

In 3 patients pleural effusion was detected.

Conclusion: This study shows that CT is more sensitive and specific than native chest radiograph in assessing the patients with pulmonary abnormalities in Wegener's granulomatosis especially for distinction of various forms of air-space fillings, where we performed high-resolution CT scanning.