

암재활

게시일시 및 장소 : 10 월 19 일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소 : 10 월 19 일(토) 11:00-11:30 Room G(3F)

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Diagnosis of Bone Metastases in False Negative of Bone Scan : A case report.

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BACKGROUND

Bone is common site of distant metastases from cancer. Bone metastasis can cause pain, fractures and weakness in the legs or arms. There are several imaging techniques to diagnose bone metastasis. Bone scan is useful in identifying osteoblastic activity. But osteolytic bone tumor can be missed. So, physician must be careful of false negative of bone scan. We report a case diagnosed for hepatocellular carcinoma (HCC) with multiple bone metastases and discuss precaution in cancer rehabilitation.

CASE

Patient was 71-year-old man who first diagnosed for HCC in April 2015. He was treated by transcatheter arterial chemoembolization and chemotherapy. During treatment, lung metastasis was found in chest CT conducted in October 2015 and chemotherapy was continued. Patient also treated by cancer rehabilitation therapy which included muscle strengthening and aerobic walking exercise. Patient's functional activities status was nearly independent and The Karnofsky Performance Score is 70. In October 2016 he complained about right leg radiating pain and tenderness on right sacral area. Numerical rating scale of pain was 6. Because MMT, sensory examination, deep tendon reflex and straight leg raise test were normal, possibilities of disc disease was little. To rule out bone metastasis, X-ray and bone scan were conducted and there is no definite evidence of bony abnormalities. Patient treated by conservative management including pain medication and hot pack therapy. In May 2017 He complained about aggravated right leg radiating pain and right buttock pain. In manual muscle test, grade on right ankle dorsiflexor was 4 and numerical rating scale of pain was 10. Electromyography was conducted and there is no evidence of radiculopathy. As cause of right leg pain was ambiguous, X-ray and bone scan were conducted again. Because there was no abnormal result, we planned to conduct PET-CT. In whole body PET-CT, large bone metastasis in right sacrum was found. Patient treated by narcotic analgesics, radiation therapy. The Spine Instability Neoplastic Score was 3. As we made a judgement that possibility of fracture was low, activities of daily living training and cane gait training was conducted. Patient's pain was decreased and functional activity status was improved. He expired for multiple tumor metastasis when February 2018.

CONCLUSION

Conducting both image studies which are morphological and functional imaging is important for diagnosis of tumor metastasis to bone. Bone scan is useful because imaging of whole skeletal muscle can be conducted. But physician must to know that bone scan has potential of false negative diagnosis in osteolytic lesion. Although bone scan findings are normal, PET-CT must be conducted for patients with suspicion of bone metastasis. Based on this precaution, it is thought that the incidence of pathological fracture caused by exercise during rehabilitation of cancer can be lowered.