Whole body MRI in the detection of skeletal metastasis: Our experience with 3 Tesla MRI

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Metastatic bone disease is a common manifestation of advanced cancers particularly breast, prostate and lung. Currently many hospitals rely on traditional imaging technique such as bone scan, CT scan and more recently PET CT scan. However, all the above involve ionizing radiation and do not necessarily provide accurate information about the disease activity. Whole-body DW imaging (WB-DWI) is emerging as a promising bone marrow assessment tool for detection and therapy monitoring of bone metastases. Advantages of WB-DWI include the fact that no ionizing radiation is administered and no injection of isotopes or any contrast medium is necessary. Importantly, whole-body skeletal examinations are possible in reasonably short data acquisition times. WB-DWI is commonly performed at 1.5T because of the ability to uniformly suppress fat over large fields of view. Recent technological advances including improved shimming routines and multi-transmit equipped MRI systems do allow WB-DWI data acquisitions at 3T. We present our local experience in whole body MRI using new Siemens Magnetum Skyra (2016) with advanced shimming software reducing the above mentioned artefacts.

Biography
Jamal Abdulkarim finished his Radiology Training in University Hospitals of Leicester, UK and obtained the FRCR. Currently, he is a Consultant Radiologist at George Elliot Hospital. He has interest in research particularly in the field of intravenous iodinated contrast media and MRI.

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