

Masterclasses

M1.2

Multidisciplinary Management of Aortic Nodal Metastasis in Endometrial Cancer

10:45 Room 221

MR and PET/MR Imaging of Endometrial Carcinoma

Lo G

Department of Diagnostic and Interventional Radiology, Hong Kong Sanatorium & Hospital, Hong Kong

Magnetic resonance (MR) provides exquisite soft tissue contrast and is especially appropriate for imaging the pelvis. MR can separate out fibroids, adenomyosis, cervical carcinoma and endometrial lesions. The junctional zone between endometrium and myometrium is well seen and tumour extension into myometrium can be identified. Multiparametric MR imaging provides anatomic images as well as functional images. Functional data such as Diffusion Imaging and Dynamic Contrast Enhancement increases diagnostic accuracy. In a cellular environment such as carcinoma, the diffusion of water molecules is restricted and this can be seen as a very dark area on the Apparent Diffusion Coefficient (ADC) map.

The PET-MRI scanner at Hong Kong Sanatorium & Hospital was installed in March 2015. To date, we have scanned 1,521 patients by 2,236 scans in total. Multiparametric MR imaging with PET functional imaging combines the best morphologic scan with the best functional scan. It is a one-stop-shop for patients and greatly increases diagnostic confidence and accuracy. MR provides unmatched locoregional staging and PET-MR is well suited for detecting nodal and distant metastases. PET-MR can also be done in a timely manner and can also reduce radiation dose by 50% to 70% compared to PET-CT.

Since MR has a limitation of not detecting pulmonary nodules less than 5mm, an ultra-low dose CT thorax is performed on our patients to ensure that all pulmonary metastases are detected.

Multiple examples of multiparametric MR and PET-MR examinations will be given.