NON-CONTRAST MRI FOR ASSESSMENT OF THORACIC AORTA DIMENSION

Introduction Multi-modality imaging plays a significant role in evaluating and interval monitoring of patients with aortopathies. Echocardiogram is the first screening test followed by Computerised Tomography (CT) and/or Magnetic Resonance Imaging (MRI). Most patients require repeated scans at interval. Both CT and MRI require contrast administration and furthermore, radiation exposure in CT. Locally, we have adopted surveillance scanning with non-contrast MR to overcome the above limitations. This is not widely practised.

Aim The aim of the study is to compare inter-modality agreement between CT (gold standard) and non-contrast MRI measurements of ascending aortic dimensions.

Methods 126 consecutive patients underwent non-contrast MRI thoracic aorta our hospitals between 2017 and 2021. Thirty-eight patients (61% males, age 61±14 years) have had both CT and MRI. A retrospective analysis was conducted to assess the inter-modality agreement of ascending aorta measurements. Statistical analysis was done using R programme (R studio). A Bland-Altman graph was used to assess inter-modality agreement of ascending aorta measurements. Differences in measurements of the two modalities were reported as mean and 95% confidence interval.

Results There is good linear correlation (Pearson’s R=0.86, p<0.05) between CT and MRI measurements. Mean difference between CT and MRI measurements was 2.39mm, 95% confidence interval 6.5mm to 8.4mm, see figure 1.

Conclusion There is good inter-modality agreement of ascending aorta measurements between CT non contrast MRI in our experience. Non contrast MRI has the advantage of requiring no radiation and no need for contrast. This is desirable particularly in young patients requiring long term surveillance.

IMPLEMENTING AN ENDOCARDITIS MULTIDISCIPLINARY TEAM AND WEEKLY MEETING IN A NON-SURGICAL CENTRE: A HEALTHCARE MODEL TO MAKE THE COMPLEX MORE SIMPLE

Introduction Infective endocarditis is a complex area of cardiology, with a highly variable clinical history and frequent atypical presentations. Despite advances in management it remains associated with a high mortality and severe complications. Most patients are diagnosed and managed outside cardiothoracic centres, either for medical management only, or prior to surgical treatment. These patients may still benefit from a coordinated approach to their care, and early input from a surgical team. ESC guidelines recommend the formation of an endocarditis team in reference centres to manage complex cases and advise on non-complicated cases in other centres. This multidisciplinary approach has been shown to significantly reduce 1 year mortality. We created an endocarditis team within a non-surgical centre, with remote input from a Cardiothoracic Surgeon, to aim to improve levels of patient care and outcomes.

Conflict of Interest Nil