Results: The MRC and CC results were available in 64 patients. There were 35 males and 29 females with a mean age ± SD; 53.7 ± 12.5 years. In 4 patients colonoscopy was incomplete with evaluation of only rectum and sigmoid as scope could not be passed beyond sigmoid colon either due to acute bend or discomfort to patient. A total of 21 polypoid lesions were detected on the CC. The abnormalities included 20 polyps (mild dysplasia-11; moderate dysplasia-2; inflammatory-2; hyperplastic-2; lymphoid tissue-2; normal -1). MRC detected only 6 polyps. The MRC detection of polyps ≤5mm (Fig 1A) was 1/15 (6%); 6-9mm (Fig 1B) was 3/4 (75%) and ≥10mm (100%). One case of carcinoma (Fig 1D) was detected on both MRC and CC. In addition there were diverticulae (Fig 1C) and a rectal fistula which were demonstrated on MRC. On per patient basis, the accuracy of MRC for detecting all size polyps was 87.5%; for polyps ≥6mm the accuracy is 98.4%. In those cases where CC was incomplete MRC did not detect any colonic lesions.

Discussion: The sensitivity of MRC for demonstrating polyps ≤5mm is very low in our study and is similar to that reported in literature. However the accuracy of MRC for detection of clinically significant polyps (≥6mm) is higher. The negative predictive value for a ≥6mm sized poly is 98.3%. Nearly half of the ≤5mm polyps detected at colonoscopy were either normal tissue/lymphoid tissue or hyperplastic and the remainder were very small in size and had low grade dysplasia. Two polyps with moderate dysplasia were identified with MRC. The limitation of our study is the low prevalence of polyps in our study. Twenty four patients also had extracolonic findings. In one case of carcinoma of the colon, the staging could be confirmed on post per patient basis. The findings on MRI and recorded the abnormalities on different segments as well as extracolonic findings. Two patients refused to undergo colonoscopy after the MRC and therefore excluded from the study. Finally 64 patients made the study group.

Conclusion: MR Colonography is feasible and results in our Asian population are similar to that described in the literature. The study results are encouraging and provides motivation for study of a larger group of patients for determining the accuracy of MRC.