Utility of Localizer Images on MRI

The Problem
Hip MRIs are one of the most commonly performed studies in musculoskeletal radiology. Localizer images often include portions of the body not evaluated on standard sequences, however are often not carefully scrutinized by radiologists.

- Missed findings on localizer images have been reported for other parts of the body including the heart and abdomen
- Hip MRI localizers include information about the abdomen and pelvis which could potentially require treatment
- Failure to carefully evaluate MRI hip localizers could adversely impact patient care by resulting in a delay in diagnosis

Aim/Goal
To evaluate the spectrum of incidental findings on hip MRI and MR arthrogram localizer images and to determine whether there are findings which could require treatment.

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The Interventions
- Conducted retrospective review of 500 hip MRIs and MR arthrograms following IRB approval
- Studies performed between January 2010 to December 2011
- Additional imaging studies and the online medical record were reviewed to confirm the findings and determine whether any findings require treatment

Lessons Learned
- Incidental findings are often present on MRI hip localizer images (42.8% of examinations)
- Careful evaluation of MR localizer images is recommended as they can add important information in conjunction with the remainder of the examination

The Results/Progress to Date

Results: Requiring Treatment

Next Steps/What Should Happen Next

- Consideration should be given to adding a comment on localizer images as a required element of standard reporting templates
- Such action may reduce the percentage of incidental findings missed by radiologists on localizer images