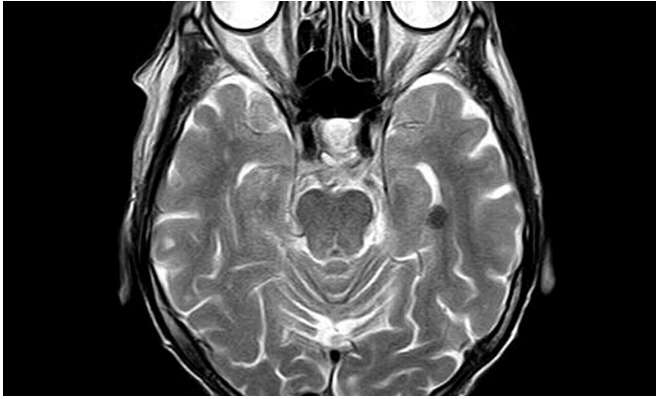


Body MRI reinterpretations plagued by discrepancies and errors

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According to an article in ARRS' *American Journal of Roentgenology* (AJR), secondary interpretations of body MRI at tertiary care centers identify a high rate of discrepancies—with primary errors being interpretive in origin—suggesting that subspecialty interpretations should be encouraged, and institutions should provide adequate resources for these interpretations to occur.

"We retrospectively identified 395 secondary MRI reports from January 2015 to December 2018 that were labeled as body MRI examinations at a tertiary care center," explained lead author Danielle E. Kostrubiak from the University of Vermont Medical Center.

After exclusions for erroneous categorization and no extant outside report, Kostrubiak and colleagues compared the outside reports with the secondary interpretations, categorizing cases as either [discrepancy](#) or no discrepancy. Subdividing the discrepancies according to the most likely reason for [error](#) via previously published categories, these categories were further divided into perceptive and cognitive errors.

"Of the 357 cases remaining after 38 exclusions," Kostrubiak et al. wrote, "246 (68.9%; 95% CI, 63.8-73.7%) had at least one discrepancy between the original outside report and the secondary [interpretation](#) provided at our institution."

The most common error type contributing to both overall and primary discrepancy was faulty reasoning (a cognitive error characterized by misidentifying an abnormality), which occurred in 34.3% of the total discrepancies (95% CI, 29.0-40.0%) and 37.8% of the primary discrepancies.

The most common error type contributing to a second discrepancy was a type of perception error called satisfaction of search, which occurred in 37.0% of the second discrepancies and 15.0% (95% CI 11.2- 19.6%) of the overall discrepancies.

"We are not aware of any studies that have specifically focused on secondary interpretations of body MRI analyzed by type of likely error, and to our knowledge, ours is the largest MRI sample size published to date," the authors of this AJR article concluded.

Although the innate subjectivity of error classification stands to limit similar studies, Kostrubiak and team acknowledged that related research should become progressively easier to conduct as [medical practices](#) adopt more detailed electronic medical records.

"The next step," they wrote, "would be to explore how these discrepancies may impact patient outcomes and overall cost to the system associated with these radiologic errors."

More information: Danielle E. Kostrubiak et al, Body MRI Subspecialty Reinterpretations at a Tertiary Care Center: Discrepancy Rates and Error Types, *American Journal of Roentgenology* (2020). [DOI: 10.2214/AJR.20.22797](https://doi.org/10.2214/AJR.20.22797)

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