44) MRI and Adenomyosis: What Can Radiologists Evaluate?
Celli V, Dolciami M, Ninkova R, Ercolani G, Rizzo S, Porpora MG, Catalano C, Manganaro L.Int J Environ Res Public Health. 2022 May 11;19(10):5840. doi: 10.3390/ijerph19105840.PMID: 35627376 **Free PMC article.** Review.

**Abstract**

Uterine adenomyosis is a common benign condition defined by the presence of heterotopic endometrial glands and stroma within the myometrium. Adenomyosis is often related to

infertility and other adverse pregnancy outcomes. Modern imaging techniques allow the non- invasive diagnosis of adenomyosis and, in this framework, Magnetic Resonance Imaging (MRI) has assumed a central role due to its high diagnostic accuracy in the detection of adenomyosis. Currently, there is still a lack of international consensus on adenomyosis diagnostic criteria and classification, despite the fact that an agreed reporting system would promote treatment outcomes and research. This review aims to emphasize the important contribution of MRI to the diagnosis of adenomyosis and to highlight how, thanks to the great tissue differentiation provided by MRI, it is possible to identify the main direct (cystic component) and indirect (junctional zone features) signs of adenomyosis and to distinguish its various subtypes according to different MRI-based classifications. We also explored the main MRI criteria to identify the most common pitfalls and differential diagnoses of adenomyosis, whose features should be considered to avoid misdiagnosis.

**Keywords:** adenomyosis; classification; endometriosis; magnetic resonance imaging.