

# Differential Diagnosis of Bicornuate and Septate Uterus: Is Comparison of Septal Signal Intensity on MR Image Useful?

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**목적(Purpose):** To evaluate the usefulness of comparison of the signal intensity of uterine septum in the differential diagnosis of bicornuate and septate uterus on magnetic resonance (MR) imaging.

**대상 및 방법(Materials and Method):** Preoperative MR imaging findings of surgically proven 5 bicornuate and 6 septate uteri were retrospectively analyzed. Because preoperative differential diagnosis of both was possible in all cases in terms of the intercornual distance, external contour of uterine fundus, and divergent angle of two uterine cavities, these criteria were excluded in this study. The signal intensity of uterine septum in patients with bicornuate and septate uterus was analyzed on T1-weighted and fast spin echo T2-weighted images obtained in the axial and coronal planes, using a 1.5-T MR scanner. The signal intensity of uterine septum especially on T2-weighted images was compared with that of myometrium or junctional zone.

**결과(Results):** The signal intensity of uterine septum in patients with bicornuate uterus (n=5) and septate uterus (n=6) was similar to that of myometrium in all cases on T1-weighted images. The septum of patients with bicornuate uterus (n=5) on fast spin echo T2-weighted images was isointense with myometrium in three and hypointense than myometrium in three cases. The uterine septum of patients with septate uterus (n=6) on T2-weighted images was isointense with myometrium in two, hypointense than myometrium in two, and isointense with or hypointense than junctional zone in two cases. No patient showed different signal intensity between upper and lower uterine septum.

**결론(Conclusion):** Because the MR signal intensity of the uterine septum in patients with bicornuate or septate uterus demonstrates not only the typical hypointense septum in septate uterus but also the various findings, it should not

be used alone in the differential diagnosis of them. In these clinically important differentiation, therefore, comprehensive analysis of MR findings in terms of the external contour of uterine fundus, intercornual distance, divergent angle of two uterine cavities, in addition to the signal intensity of the uterine septum, should be considered.