



(uterine artery embolization, UAE) (expulsion)

MRI 7 MRI 29

UAE , UAE 13 가 가

(luteinizing - hormone releasing - hormone, LHRH) (1, 2) (Terumo, Tokyo, Japan)

UAE (3 - 6) (pedunculated) (superselection) 355 - 500 μ m

polyvinyl alcohol (Contour; Target Therapeutics, Fremont, U.S.A.)

(3 - 6) UAE MRI UAE 3 가 UAE 12

MRI MRI 37.8 MRI (Fig. 1B)

29 가 (Fig. 1C) (median episiotomy)

1 가 4.6 g/dl 20 cm (Fig. 1D)

MRI (pack cell) 4 10 cm 가 (Fig. 1E).

가 7.2 g/dl (pack cell) 2 20 cm 6 7 MRI

가 UAE (Fig. 1F) 20 (Fig. 1G) MRI 48 , 103

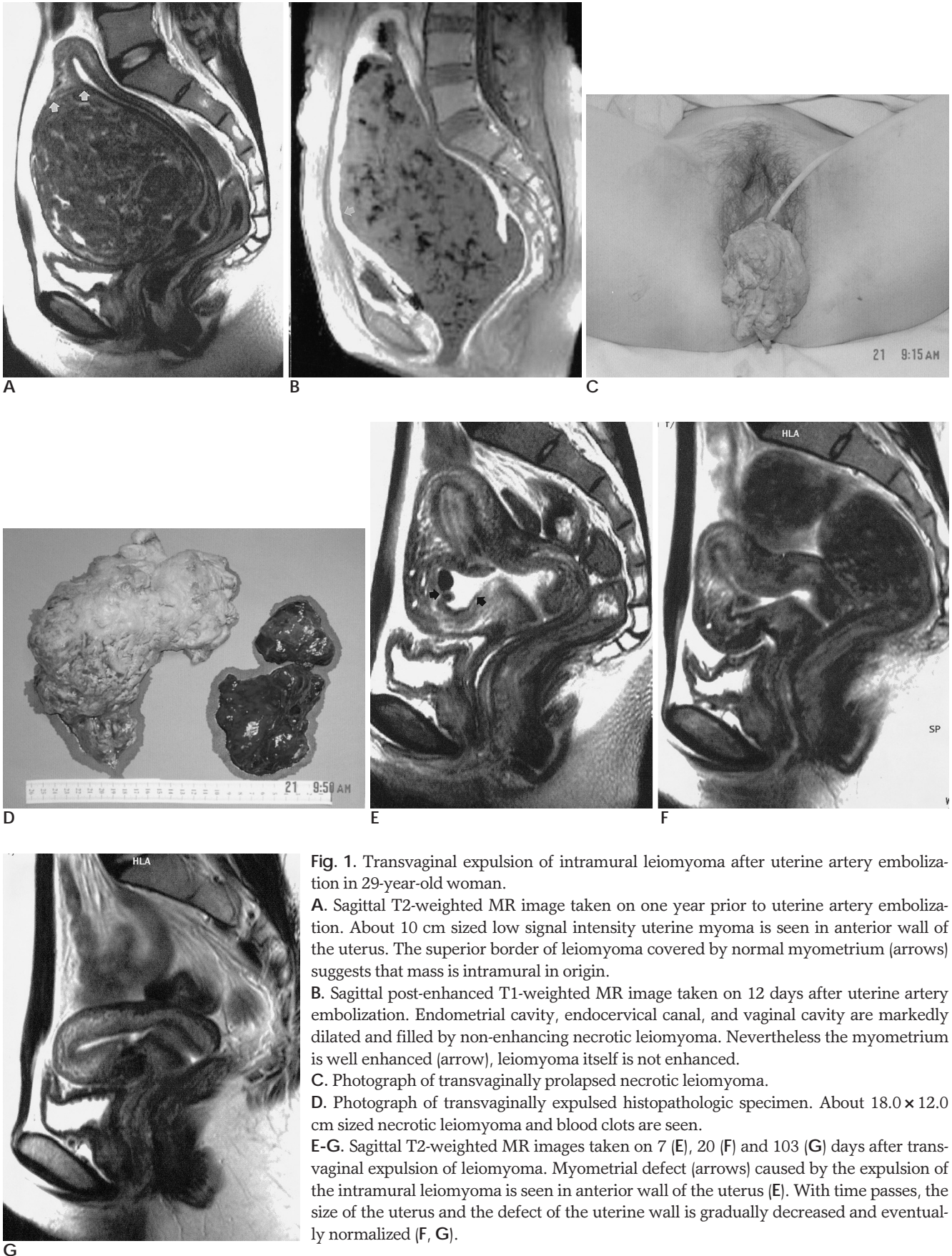


Fig. 1. Transvaginal expulsion of intramural leiomyoma after uterine artery embolization in 29-year-old woman.

A. Sagittal T2-weighted MR image taken on one year prior to uterine artery embolization. About 10 cm sized low signal intensity uterine myoma is seen in anterior wall of the uterus. The superior border of leiomyoma covered by normal myometrium (arrows) suggests that mass is intramural in origin.

B. Sagittal post-enhanced T1-weighted MR image taken on 12 days after uterine artery embolization. Endometrial cavity, endocervical canal, and vaginal cavity are markedly dilated and filled by non-enhancing necrotic leiomyoma. Nevertheless the myometrium is well enhanced (arrow), leiomyoma itself is not enhanced.

C. Photograph of transvaginally prolapsed necrotic leiomyoma.

D. Photograph of transvaginally expelled histopathologic specimen. About 18.0 × 12.0 cm sized necrotic leiomyoma and blood clots are seen.

E-G. Sagittal T2-weighted MR images taken on 7 (**E**), 20 (**F**) and 103 (**G**) days after transvaginal expulsion of leiomyoma. Myometrial defect (arrows) caused by the expulsion of the intramural leiomyoma is seen in anterior wall of the uterus (**E**). With time passes, the size of the uterus and the defect of the uterine wall is gradually decreased and eventually normalized (**F**, **G**).

- 3
- UAE
- 1995 Ravina (3)
- UAE가
- 90%
- 10 - 90%
- (3 - 5).
- 가
- (prolapse)
- Ellenbogen (1)
- trip -
- UAE (3 - 6).
- 7
- 10
- Bradley (5)
- Ravina (3)
- 6
- UAE
- Bradley (5)
- UAE 12
- MRI
- MRI
- UAE
- MRI가
- MRI
- (6) 1 (3 - 5)
- 가
- UAE
- LHRH
- 가
- (4), UAE
- Berowitz (4) UAE
- (7)
- 가
- UAE
- 가
- UAE 16
- 가
- MRI
- 가
- UAE
- UAE
1. Ellenbogen A, Shulman A, Libal Y, Jaschevatzky O, Anderman S, Grunstein S. Complication of triptorelin treatment for uterine myomas. *Lancet* 1989;2:167-168
 2. Chipato T, Healy DL, Vollenhoven B, Buckler HM. Pelvic pain complicating LHRH analogue treatment of fibroids. *Aust N Z J Obstet Gynaecol* 1991;31:383-384
 3. Ravina JH, Herbreteau D, Ciraru-Vigneron N, et al. Arterial embolization to treat uterine myomata. *Lancet* 1995;346:671-672
 4. Berkwitz RP, Hutchins FL, Worthington-Kirsch RL. Vaginal expulsion of submucosal fibroids after uterine artery embolization. A report of three cases. *Jr Reproduc Med* 1999;44:373-376
 5. Bradley EA, Reidy JF, Forman RG, Jarosz J, Braude PR. Transcatheter uterine artery embolization to treat large uterine fi-

broids. *Br J Obstet Gynaecol* 1998;105:235-240
6. Abbata S, Spies JB, Scialli AR, Jha RC, Lage JM, Nikolic B. Transcervical expulsion of a fibroid as a result of uterine artery embolization for leiomyomata. *J Vasc Interv Radiol* 1999;10:409-411

7. Perl V, Marquez J, Shally AV, et al. Treatment of leiomyomata uteri with D-Trp6-luteinizing hormone-releasing hormone. *Fertil Steril* 1987;48:383-389

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Transvaginal Expulsion of Intramural Leiomyoma after Uterine Artery Embolization: Case Report¹

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We report a case in which an intramural uterine leiomyoma was transvaginally expelled after uterine arterial embolization (UAE). A 29-year-old unmarried female presented with vaginal bleeding, and at pre-treatment MRI an intramural leiomyoma was diagnosed. UAE was performed and after 13 days the tumor was transvaginally expelled. Follow-up MRI performed seven days later depicted a large myometrial defect in the anterior uterine wall; subsequent follow-up MRI showed that the defect became gradually smaller, and the size and configuration of the uterus progressively normalized.

Index words : Uterus, neoplasms
Uterus, fibroids
Uterine artery embolization
Magnetic resonance (MR), imaging

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