

## Safety and Effectiveness of UFE in Fibroids Larger than 10 cm

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### Abstract

**Introduction** Early literature suggested that the size of the uterus, the size of the dominant fibroid, and the amount of applied embolization particles would be the risk factors for major postprocedural complications, but recent publications have confuted these early results. The purpose of our study was to evaluate whether the size of the dominant fibroid would influence the complication rate and effectiveness in a large single-center cohort.

**Patients and Methods** From 28 April 2008 until 31 December 2012, 303 patients had uterine artery embolization (UAE). 262 patients had small [largest diameter <10 cm (Group 1)], 41 patients had large [largest

diameter >10 cm (Group 2)] fibroid. UAE was performed from unilateral femoral access using 500–710 and 355–500 µm polyvinyl alcohol particles. Periprocedural and postprocedural complications and numerical analog quality-of-life scores (0—unbearable symptoms; 100—perfect quality of life) were listed and statistically analyzed.

**Results** During the mean follow-up time [ $7.79 \pm 5.16$  (SD) month], data on 275 patients ( $275/303 = 90.8\%$ ) were available. Quality-of-life score was  $33.3 \pm 23.5$  and  $33.5 \pm 24.1$  before, whereas  $85.6 \pm 16.0$  and  $81.5 \pm 23.5$  after UAE in Group 1 and Group 2, respectively, (Mann–Whitney *U* test one-sided,  $p = 0.365$ ). There were 4 myoma expulsions, 1 acute myomectomy, and 2 acute hysterectomies reported from Group 1, meanwhile 1 myoma expulsion, 1 acute myomectomy, and 2 acute hysterectomies were documented from Group 2 (NS differences).

**Conclusion** There was no significant difference in the effectiveness and in the number of minor and major complications between fibroids with <10 cm largest diameter compared to those >10 cm.

**Keywords** Uterine artery embolization (UAE) · Dominant fibroid · Major complications · Acute hysterectomy and myomectomy

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