

Comparison of gain in Quality of Life (SCdV-MU) on patients with benign gynecology conditions undergoing Uterine Artery Embolization versus Laparoscopic Total Hysterectomy: real evidence based study

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BACKGROUND

- One common affection in women in fertile age is abnormal uterine bleeding. The most frequent causes are structural affections of the uterus, mainly divided into uterine myomatosis and adenomyosis.
- Many patients opt for a definitive solution, namely Total Laparoscopic Hysterectomy (TLH), but not all want to lose their uterus or undergo a major surgery. An alternative for these patients is Uterine Artery Embolization (UAE) that makes it possible to atrophy the myomas or the adenomyotic area and improve clinical symptoms, even eliminating them.
- This study aims to compare, through the UFS-QoL questionnaire, the gain of quality of life of two groups of women, one undergoing Total Laparoscopic Hysterectomy and the other Uterine Artery Embolization.

METHODS

- Observational cohort prospective study comparing quality of life UFS-QoL scores between patients that underwent a TLH versus UAE. Ethical Committee approved the study.
- Both groups followed the standard protocols used in real clinical practice once patients had chosen the intervention they preferred.
- REAL EVIDENCE BASED STUDY

RESULTS

- Forty-nine eligible patients were enrolled at the time of the study termination (total laparoscopic hysterectomy n=33, uterine artery embolization n=16). There were no significant differences between the baseline variables studied of the two groups.
- The results of the questionnaire showed a general improvement after the procedure with no clinical or statistically significant differences. Even though, there is a tendency of a slightly higher differential gain of quality of life for patients who underwent a TLH versus UAE, although not statistically significant.

Table 1. Baseline characteristics of the study population

	HTL (n=33)	UAE (n=16)	Total (n=49)	P
Age (years ± s.d.)	45,8 ± 5,4	46,4 ± 3	46 ± 4,7	0,494
BMI (kg/m ² /mean ± s.d.)	28,8 ± 5,5	26,2 ± 6,2	28,2 ± 5,7	0,845
Active smoking (n; %)	6 (18,2%)	4 (25%)	10 (20,4%)	0,507
Multiparity (n; %)	10 (30,3%)	4 (25%)	14 (28,5%)	0,692
Preop Hb (g/dL; mean ± s.d.)	13 ± 1,4	11,4 ± 1,3	12,6 ± 1,6	0,799
Lowest level of Hb (g/dL; mean ± s.d.)	10,2 ± 2,7	9,4 ± 1,9	10,1 ± 2,6	0,623
Nº of myomas (n, mean ± s.d.)	2,3 ± 1,8	2,2 ± 1,9	2,3 ± 1,8	0,529
Size biggest myoma (mm; mean ± s.d.)	60,8 ± 28,5	76,5 ± 28,8	66,3 ± 2	0,357
Indication				
• Only abnormal bleeding	14 (42,4%)	11 (68,8%)	25 (51%)	
• Dysmenorrhea	8 (24,3%)	0 (0%)	8 (16,3%)	0,246
• Pelvic occupation	11 (33,3%)	5 (31,2%)	16 (32,7%)	
ASA				
• < 3	26 (78,8%)	11 (69,7%)	37 (75,1%)	0,323
• ≥ 3	7 (21,2%)	5 (31,2%)	12 (24,3%)	
Type of anesthesia (n; %)				
• General	33 (100%)	1 (6,3%)	34 (75,6%)	
• Local + sedation	0 (0%)	2 (12,5%)	2 (4,1%)	0,001
• Peridural + sedation	0 (0%)	9 (56,2%)	9 (18,3%)	
Intraoperative complications (n; %)				
• Bowel perforation	1 (3,0%)	0 (0%)	1 (2,0%)	
• Conversion to laparotomy	10 (30,3%)	0 (0%)	10 (20,4%)	
• Intraoperative transfusion	1 (3,0%)	0 (0%)	1 (2,0%)	
Postoperative transfusion (n; %)	0 (0%)	1 (6,25%)	1 (2,04%)	

Table 2. Results of the differential score for UFS-QoL questionnaire

Score (mean;range)	HTL	UAE	Total	p
HRQL total	65,4 (13-102)	55,7 (-14-103)	62,2 (-14-103)	0,577
• Concern	14,6 (4-20)	12,8 (0-20)	14 (0-20)	0,589
• Activities	18,8 (1-28)	14,7 (0-28)	17,4 (0-28)	0,615
• Energy/mood	14,3 (-3-28)	13,4 (-7-28)	14 (-7-28)	0,515
• Control	10,6 (0-20)	9,3 (-5-20)	10,2 (-5-20)	0,535
• Self-conscious	4 (-3-12)	2,8 (-3-8)	3,6 (-3-12)	0,587
• Sexual function	3 (0-8)	2,8 (-5-8)	2,9 (-5-8)	0,496
Symptom severity	19,2 (5-32)	18,5 (-2-32)	19 (-2-32)	0,498
Total score	84,6 (29-128)	74,2 (-16-130)	81,2 (-16-130)	0,557

Figure 2. Comparison of mean and range of total UFS-QoL: before, after the procedure and differential score

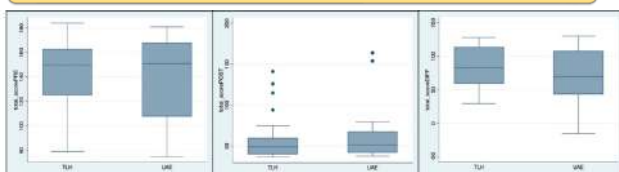
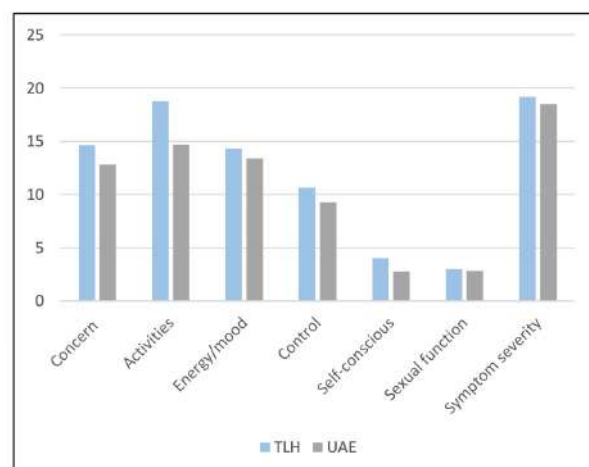


Figure 1. Comparison of the differential score between TLH and UAE



CONCLUSIONS

- In conclusion, both total laparoscopic hysterectomy and uterine artery embolization seem to similarly improve quality of life of patients with abnormal uterine bleeding in real clinical practice, but further larger studies are needed to confirm our hypothesis.
- **KEY WORDS:** Anemia, hemoglobin, quality of life, abnormal uterine bleeding, myomas, uterine myomatosis, fibroids, hysterectomy, uterine artery embolization.