

UTERINE FIBROID EMBOLIZATION

by Dr Eisen Liang

Uterine fibroids may cause significant menorrhagia, bulk related symptoms such as pelvic pain, discomfort and urinary symptoms. Failing conservative medical treatment, hysterectomy and myomectomy maybe recommended. In patients who desire to avoid surgery, uterine artery embolization (UAE) is a minimally invasive alternative. UAE utilizes angiographic techniques to embolize the uterine arteries. Embolization has been used for post-partum hemorrhage, pelvic trauma, preoperative devascularization, and liver malignancy. UAE occludes the blood supply to the fibroids, which results in ischaemia and subsequent degeneration. Shrinkage of fibroid leads to decrease or resolution of bulk symptoms.

The procedure is performed in the angiographic suite, under conscious sedation and local anesthesia. The femoral artery is accessed with 4Fr sheath. Both uterine arteries are selectively catheterized and embolized with particles such as polyvinyl alcohol or tris-acryl microspheres under fluoroscopic control. The procedure takes approximately 1 hour.

Most patients will experience varying degrees of post-embolization syndrome for 4 to 5 days. This includes pelvic pain, nausea, and possibly fever. Patients are hospitalized overnight for pain control. The pain can be moderately severe and usually requires intravenous narcotics especially in the first 6 to 8 hours. Rarely, a second night of hospitalization is needed for pain control. Cramping pain, fatigue, and possibly fever are common during the subsequent

few days. Most symptoms resolve within 4 to 5 days. Patient should anticipate returning to work and normal activities 7 days after the procedure.

Transient amenorrhea occurs in 5-10% of patient treated with UAE. Permanent amenorrhea is less than 3% in age < 45, but more frequent (7-14%) in age > 45. Transcervical fibroid expulsion occurs < 3%, majority can be passed successfully. Uterine infection, endometritis, uterine necrosis, DVT/PE and non-target embolization are rare complications, each occurs < 1%.

Studies suggests UAE is almost as effective as hysterectomy in controlling primary symptoms of menorrhagia, bulk related symptoms and pain. Compared with myomectomy, UAE is more effective in resolving or improving symptoms of menorrhagia and pain, but less effective than myomectomy for pressure symptoms. UAE and surgery are equivalent in improving quality of life. Comparing with surgery, UAE requires significantly reduced hospital stay and significantly reduced convalescence and days to return to normal activity/work. UAE does not appear to affect ovarian function in younger women. Permanent amenorrhea tends to occur in older women close to natural menopause. Effect of UAE on fertility is not yet thoroughly studied. The aim of UAE is to treat fibroid symptoms in situ with a minimally invasive technique, retaining the uterus as a patient perceived benefit. UAE is not intended to maintain uterine viability for pregnancy, although pregnancy is possible after UAE. Miscarriage rate after UAE is not different to the background miscarriage rate

in a population of similar age.

UAE has been thoroughly assessed by Medical Services Advisory Committee (MSAC), Australian Government Department of Health and Aging. MSAC reached the following conclusion: "the evidence suggests that UAE is safe, clinically effective and potentially cost-effective for the treatment of symptomatic uterine fibroids". MSAC recommends that UAE be funded for the treatment of women with symptomatic uterine fibroids.

View full MSAC report and full reference

list: www.msac.gov.au/internet/msac/publishing.nsf/Content/completed-assessments-1p-1 (select assessment 1081)

Further Physician and patient information:

www.sir.net.au

www.sirweb.org/patPub/uterine.shtml

www.fibroidoptions.com

www.hopeforfibroids.org/UAE.htm

UAE is now available at San Radiology. For enquires please call 9980 3881.

To book a consultation with Dr Eisen Liang please call 9487 9840 or fax 9487 9845.



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