



Should we be putting our scalpels down? Is HIFU the answer to fertility-sparing fibroid treatment?

N Tempest, D Hapangama

Liverpool Women's Hospital, University of Liverpool, Liverpool, UK

Linked article: This is a mini commentary on J Chen et al. To view this article visit <https://doi.org/10.1111/1471-0528.14689>.

Published Online 8 June 2017.

HIFU is a fertility-sparing, outpatient procedure that has been reported to be safe and effective in treating patients with fibroids for 15 years (Wang et al. *Zhonghua Chao Sheng Ying Xiang Xue Za Zhi* 2002;11:161–3). It was approved by the FDA in America in 2004. HIFU has been reported to have similar cost-effectiveness as all other uterine-preserving treatments.

Despite all this, it is currently only available in two private treatment centres and on a case-by-case basis on the NHS in the UK, and it is not consistently covered by any major US insurance company.

NICE guidance suggests that HIFU is adequate in the short term for fibroids, although highlighting the possibility of requiring further treatment and its uncertain effect on a subsequent pregnancy. The available evidence on the safety of the method supports the use of this procedure, provided that the routine arrangements are in place for clinical governance and audit (<https://www.nice.org.uk/guidance/ipg413>).

Fibroids are the most common benign gynaecological tumours in

women of childbearing age (prevalence 20–25%) and current conventional therapies include medical hormonal manipulation, uterine artery embolisation, myomectomy and hysterectomy. This large IDEAL Prospective Exploration Study paves the way for a future gold standard RCT comparing HIFU with the conventional therapies such as myomectomy and hysterectomy for patients suffering with fibroids, to ascertain efficacy data. Furthermore, the rapid post-procedure recovery reported with HIFU has obvious financial and patient satisfaction implications that can also be confirmed in a RCT.

This study, however, does not include patients who wish to retain fertility for obvious reasons of uncertain safety in that particular group, and only the premenopausal women who had completed their family with no plans for future pregnancy were included. Nevertheless, HIFU could be a very attractive option for younger women with fibroids and plans for future pregnancy, as the available treatment options for this patient group are particularly limited. Keltz et al.

reported outcomes of 102 pregnancies following HIFU, demonstrating that HIFU is potentially a minimally invasive alternative treatment for fibroids. Further confirmation of the reproductive outcomes following fertility-sparing fibroid therapies are crucial to determine whether they are appropriate for women with symptomatic fibroids who desire future fertility (Keltz et al. *J Minim Invasive Gynecol* 2017; S1553–4650). In another smaller study ($n = 12$) no significant differences were observed in pre- and post-HIFU AMH levels with no evidence of procedure-associated menopause, concluding that ultrasound-guided HIFU in the treatment of uterine fibroids does not adversely affect ovarian reserve (Cheung et al. *J Obstet Gynaecol Can* 2016;38:357–61). Certainly, the above data encourage consideration of this method for patients wanting the symptoms associated with fibroids to be treated without losing their fertility.

Therefore, we support this novel approach for the treatment of fibroids and the proposed RCT, an excellent practical outcome for this

IDEAL study in assisting in the development of definite RCTs for complex interventions. HIFU will potentially add a novel dimension to

the limited treatment options currently available for many women with symptomatic fibroids worldwide.

Disclosure of interests

None declared. Completed disclosure of interests form available to view online as supporting information. ■