

Letter to the Editor

Re: Comparison of IVF-ET outcomes in patients with hydrosalpinx pretreated with either sclerotherapy or laparoscopic salpingectomy

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Dear Sir,

We have read the article published by Na et al. [1] with great interest. The conclusions reported by the authors was that treating hydrosalpinx prior to the IVF procedure is thought to improve the likelihood of successful IVF outcome. None of the cases experienced persisting pain, need for surgery or hospitalization.

Recent studies have argued for sclerotherapy after aspirating a hydrosalpinx under ultrasound in hope of better success rate in IVF/ICSI cycles than that obtained without aspiration [2,3]. To overcome the drawback of high recurrence rate associated with ultrasound-guided transvaginal aspiration of hydrosalpinges, ethanol sclerotherapy has been introduced as a new therapeutic option. Ethanol rapidly coagulates the active endothelial cells lining the cyst wall but penetrates the fibrous capsule slowly causing minimal local or systemic complications [4]. However, in an experimental controlled animal study, Atilgan et al. [5] shed lights on the possible damage level of adjacent ovarian reserve in rats after local ethanol application through inducing fibrosis and apoptosis. As yet, no data are available in the literature concerning its effect on the ovarian reserve in human as well as its long-term sequelae especially in women suffering from infertility.

Here we report the laparoscopic findings of five patients who had undergone ethanol sclerotherapy for hydrosalpinges before attempting IVF/ICSI. All patients were planned for laparoscopy before repeat IVF/ICSI cycles because of recurrence with persistent pelvic pain not resolved by analgesics. All women had a medical record of a prior diagnostic laparoscopy before first IVF/ICSI trial reporting no adnexal adhesions. The most distressing finding was that all patients had severe and unusual pelvic adhesions surround the ovaries. The adhesions were thick, string-like, and the majority of which were adhered

to the Douglas pouch and the lateral pelvic wall. Interestingly, in two cases, there were thick adhesions between the rectum and the intestine, which might have been caused by the leakage of injected ethanol.

It has been suggested that adhesion formation could occur after transvaginal aspiration alone [3]. However, the findings described here show that all the cases undergoing ethanol injection for hydrosalpinx had severe and unfamiliar thick ovarian adhesions. Although the exact mechanism of extensive adhesions after leaked ethanol sclerotherapy are unknown, one may infer that chemical irritation of the visceral peritoneum together with the fact that the ovary is sensitive to noxious chemicals, potential damage might remain to be excluded. Furthermore, the possible toxicity of injected ethanol to ova located in the surrounding ovarian cortex together with the actively dividing oocytes has not been completely excluded.

Based on these findings, ethanol sclerotherapy for hydrosalpinx before IVF/ICSI cycles, despite being less invasive when compared with surgery, seems to be a traumatic and harmful therapy and should be used cautiously. Further randomized trials are required to confirm these data.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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Received: Jan 15, 2014