DEBATE

Should hysteroscopy be a part of the basic infertility workup?

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The state of the art of the infertility workup, strange as it may appear, has never been accurately defined. A recent survey, that was designed to determine how reproductive endocrinologists practice on a daily basis, demonstrated that the five basic tests that were regarded as the cornerstone of the infertility evaluation were: semen analysis, assessment of ovulation, hysterosalpingogram (HSG), laparoscopy, and the post-coital test (Glatstein et al., 1997a). It would seem that there has been no change during the last 25 years. It was reported that <50% of the specialists would include a more advanced and more accurate modality of evaluating the uterine cavity, such as hysteroscopy, as part of their routine investigation (Glatstein et al., 1997a). We feel that this finding should be evaluated further.

One of the basic steps of the infertility workup is to assess the shape and regularity of the uterine cavity. Historically, and still today as it turns out, the HSG has been the most commonly used test for this purpose. During the last two decades, however, several studies have demonstrated that when the uterine cavity has to be investigated within the infertility practice on a daily basis, demonstrated that the five basic tests that were regarded as the cornerstone of the infertility evaluation were: semen analysis, assessment of ovulation, hysterosalpingogram (HSG), laparoscopy, and the post-coital test (Glatstein et al., 1997a). It would seem that there has been no change during the last 25 years. It was reported that <50% of the specialists would include a more advanced and more accurate modality of evaluating the uterine cavity, such as hysteroscopy, as part of their routine investigation (Glatstein et al., 1997a). We feel that this finding should be evaluated further.

Although there are still no prospective randomized studies to prove that hysteroscopy is superior to HSG in terms of pregnancy rates, hysteroscopy has become the gold standard for the diagnosis of intrauterine abnormalities (Ruach et al., 1998).

30 years ago when first introduced into wide gynaecological practice, diagnostic hysteroscopy was a cumbersome procedure requiring general anaesthesia, producing a blurred picture due to primitive optics. Nowadays, however, diagnostic hysteroscopy is well accepted as an accurate, simple and safe office procedure (Ruach et al., 1998). It can be performed by every gynaecologist after a short period of training and does not require a referral to a highly specialized operator. Due to the constant technological improvements the optics are becoming smaller yet produce a precise view. These improvements allow an increasing number of the diagnostic hysteroscopies to be performed in an outpatient setting, with success rates of up to 98.2% (Vercellini et al., 1997a). The videohysteroscopy allows simultaneous display of the test results to the patient, without exposure to ionizing radiation or allergic reactions to iodinated contrast medium.

Why is it then that, with all the proven diagnostic advantages of hysteroscopy, 96% of all board-certified reproductive endocrinologists in the US still prefer the HSG as their initial screening test of the uterine status? Is it the ‘immortal’ advantages of the HSG or some kind of medical conservatism?

Many clinicians would answer that the major advantage of HSG is that it provides information on both the status of the uterine cavity and of the Fallopian tubes, while hysteroscopy solely evaluates the uterine cavity. Yet, we feel that the drawbacks of the HSG as a screening test are so substantial that the additional information it produces does not justify compromising evaluation of the cavity. Moreover, it is well known that small intrauterine lesions, which may be of great significance in causing reproductive failure (such as adhesions, polyps, or submucous myomas), are diagnosed much more precisely by hysteroscopy. These lesions many times are missed by HSG (Prevedourakis et al., 1994) or even by transvaginal ultrasonography (Vercellini et al., 1997). This explains why hysteroscopy has become the routine test to

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assess the uterine cavity after recurrent IVF failure and in recurrent aborters (Raziel et al., 1994). Thus, we believe that there is now enough data to suggest that hysteroscopy should be added as one of the routine tests during the infertility workup. When indicated, the HSG or one of the newer alternative techniques to evaluate tubal morphology and function should supplement the hysteroscopic assessment.

One of the novel techniques of endotubal evaluation is Falloposcopy; this is a microendoscopic technique, which allows direct visualization of the tubal lumen by a transvaginal approach. As such, Falloposcopy might provide more details than the indirect techniques, of the morphology and even aetiology of the infertility (Rimbach et al., 1996). It has recently been suggested that the greater accuracy of diagnosis by Falloposcopy may indicate that it might be incorporated in the initial screening of infertile patients (Dechaud et al., 1998). In an outpatient setting, Falloposcopy might complement the hysteroscopic evaluation of the infertile patient.

The currently available hysteroscopic optics have still to be improved. It has recently been reported that magnification by the hysteroscope lens can alter and distort the apparent size of images viewed (Hickey et al., 1998). Nevertheless, we suspect that many clinicians are unaware of the constant improvements that have already been made in the endoscopy field. These specialists still regard hysteroscopy as an in-patient procedure performed under general anaesthesia, and as such, a much more complicated procedure than other outpatient diagnostic procedures. Time has come to recognize the change!

Therefore, we suggest that diagnostic hysteroscopy, which is one of the most rewarding diagnostic tools in basic reproductive evaluation, should be part of the infertility workup.

References