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Microlaparoscopy: a comparative study of diagnostic accuracy*†

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> Objective: To investigate the diagnostic accuracy of microlaparoscopy in comparison to laparoscopy with a standard 10-mm laparoscope.

Design: Prospective evaluation by two independent observers.

Setting: Academic Medical Center. Patient(s): Ten patients scheduled to undergo diagnostic laparoscopy for the indications of

infertility and/or chronic pelvic pain.

Intervention(s): Two surgeons were present for each operation. Diagnostic laparoscopy was performed using the Microlap 2-mm laparoscope (Imagyn Medical Inc., Laguna Niguel, CA). Standard diagnostic laparoscopy was then performed using a 10-mm laparoscope. After each procedure, each surgeon reported his or her observations in a confidential manner to a third

Main Outcome Measure(s): Endometriosis and adnexal adhesions were staged. Observaperson to record. tions made with the microlaparoscope were compared with those obtained with a standard 10mm laparoscope for each surgeon. The observations of both surgeons were also compared with

each other's to evaluate interobserver differences.

Result(s): Operative findings reported by each individual surgeon using the microlaparoscope correlated with the operative findings reported using the larger laparoscope. Scores for both endometriosis and adnexal adhesions did not differ in any significant way. Endometriosis scores differed by no more than 6 points, and adhesion scores differed by no more than 2 points, with no subsequent change in severity classification for either finding. Furthermore, when comparing the additional operative findings of the two surgeons, no difference was noted when using either the microlaparoscope or a standard 10-mm laparoscope.

Conclusion(s): The diagnostic accuracy achieved with microlaparoscopy is comparable to that achieved with standard 10-mm laparoscopy.

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Key Words: Microlaparoscopy, diagnostic laparoscopy, laparoscopy

Laparoscopy is a common operative procedure performed by gynecologists and is invaluable in the clinical evaluation of infertility and pelvic pain. Recent improvements in fiberoptic technology have led to the development and manufacture of minilaparoscopy or microlaparoscopy systems. Microlaparoscopes have significantly reduced diameters, and consequently, less anesthesia, local or IV, is required for patient acceptance of the procedure. Palter and Olive (1) have recently shown that minilaparoscopy under local anesthesia is well tolerated by patients with infertility and chronic pelvic pain and that conscious pain mapping helps to identify potential areas of pelvic pain in the latter group. Furthermore, office laparoscopy under local anesthesia was associated with an almost 80% reduction in billed charges when compared with hospital-based laparoscopy under general anesthesia.

With today's emphasis on cost containment in medical practices, office-based diagnostic laparoscopy using these smaller instruments that require less anesthesia and subsequent monitoring has been

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when and how to procreate is best left to the patients and their physicians (3, 4).

Our case represents a successful pregnancy in what is evidently the oldest recipient of oocyte donation reported in the world. A previous pregnancy in a woman >62 years of age was reported in Italy (2). In that case, the patient was 61 years, 10 months, and 1 week on the day of ET and 62 years, 6 months, and 2 weeks on the day of delivery (Antinori S, personal communication). In our case, the patient was 63 years and 2 weeks old at the time of ET and 63 years and 9 months at the time of delivery. It is difficult to generalize from the successful obstetric outcomes of individual cases. We previously reported good outcomes in a series of women over the age of 50 (5). However, there remains a paucity of data about obstetric outcome in this age group (4), and therefore it is easy to recommend that extreme care

should be exercised when managing the pregnancies in these women.

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