imaging studies may fail to localize a small sized tumor. SOVS may help in making an accurate diagnosis and in localizing the tumor. Owing to the complications associated with SOVS this diagnostic modality should be restricted to appropriate cases and performed in a center with expertise in venous catheterization.

*Supported by:* None

**P-98**

**The prevalence of intracavitary and intramural uterine abnormalities: A prospective study of 1009 consecutive women.** I. Tur-Kaspa, M. Hartman, J. Hartman, A. Hartman. Reproductive Genetics Institute, Chicago, IL; RDS Diagnostics, Ltd., Toronto, ON, Canada.

OBJECTIVE: To determine the prevalence of intracavitary and intramural abnormalities in non-selected groups of infertile and non-infertile women.

DESIGN: Prospective controlled study.

MATERIALS AND METHODS: 1009 consecutive patients who were referred for Sonohysterography (SHG) underwent preliminary assessment with transvaginal US (GE Logiq 400 Pro), followed by a sonohysterogram by an experienced reproductive sonographer. All intracavitary and intramural abnormalities were recorded. 600 patients were referred for sonohysterogram for the evaluation of infertility or before starting IVF. The non-infertile control (n=409) were referred for the SHG for abnormal uterine bleeding (AUB). t-tests and Chi-square tests were used as appropriate.

RESULTS: The percentage of women with intracavitary polyps, submucosal fibroids, intrauterine adhesions, intramural fibroid, and adenomyosis is presented in table 1.

**Prevalence of intracavitary and intramural abnormalities in infertile and non-infertile women**

| Table 1 | Infertile women (n= 600) | Non-infertile women with AUB (n= 409) | P |
|---|---|---|---|
| % with polyps | 13.0% (n= 78) | 29.8% (n= 122) | <.0001 |
| % with submucosal fibroids | 2.8% (n= 17) | 9.1% (n= 37) | <.0001 |
| % with intrauterine adhesions | 0.3% (n= 2) | 0.7% (n= 3) | NS |
| % of women with intracavitary abnormalities | 15.5% (n= 93) | 37.2% (n= 152) | <.0001 |
| % with intramural fibroids | 20.5% (n= 123) | 37.2% (n= 152) | <.0001 |
| % with adenomyosis | 24.0% (n= 144) | 52.3% (n= 214) | <.0001 |
| % of women with intramural abnormalities | 40.2% (n= 241) | 71.4% (n= 292) | <.0001 |
| % of total women with abnormalities | 48.2% (n= 289) | 85.3% (n= 349) | <.0001 |

CONCLUSION: As expected, the prevalence of both intracavitary and intramural abnormalities was significantly higher in women with AUB. Intrauterine adhesions were a rare finding in both groups. SHG combined with transvaginal 2D or 3D US is an excellent method to evaluate uterine pathology.

*Supported by:* None.

## MALE FACTOR: ART

**P-99**

**Multiple *i.v.* oxytocin injection may yield sperm in azoospermic men scheduled for TESE.** A. Y. Rezk Jr., H. G. Al-Inany Jr., M. Bedaiwy Jr. Benha University, Benha, Egypt; Cairo University, Cairo, Egypt; Assuit University, Assuit, Egypt.

OBJECTIVE: A role for oxytocin in promoting sperm transit is supported by the localization of oxytocin receptors in the cauda epididymis and ductus deferens, and the presence of receptors on Leydig, Sertoli and epididymal epithelial cells provides further evidence that Oxytocin increase contractility in the epididymis and modulate steroidogenesis. The aim of the present trial is to evaluate the value of multiple IV injection of oxytocin in azoospermic men scheduled for TESE/ICSI.

DESIGN: A prospective clinical trial.

MATERIALS AND METHODS: Twenty eight infertile azoospermic men were injected with 1.0 IU oxytocin IV daily for four successive days. Last injection was 20 minutes before collecting semen sample by masturbation. Data were then compared to their semen analysis one week before oxytocin injection (every case was its own self control).

RESULTS: Motile spermatozoa were found in semen in 8 participants (28.6%). Number of sperm identified ranged between 1–5 motile sperm. Motility ranged from shaking movement to progressive movement. In cases where sperm showed any indication of movement, it was used for ICSI. TESE were done in other subjects who yielded zero sperm. No difference in Blood pressure and pulse were recorded pre- and one hour post- injection. However, 5 cases complained of tension headache and hot flush.

CONCLUSION: Multiple dose oxytocin injection in azoopermic men prior to ICSI may yield some spermatozoa, hence saving some azoospermic men doing TESE.

*Supported by:* None

**P-100**

**ICSI treatment outcomes with testicular-, epididymal- or low-concentration ejaculated sperm. A function of source or concentration?** O. Perez, B. D. Barnett, S. J. Chantilis, J. D. Madden, A. J. Rodriguez, M. Meintjes. Presbyterian Hospital ARTS Program, Dallas, TX.

OBJECTIVE: Testicular and epididymal sperm may not result in equivalent fertilization and pregnancy outcomes (Nagy *et al*., 1995). It is frequently reported that fertilization and pregnancy outcomes are lower when using testicular sperm for ICSI instead of epididymal or ejaculated sperm (Rossin-Amar *et a*l., 2000). The objectives of this study were: 1) to confirm that clinical outcomes are better when using epididymal- or low-concentration ejaculated sperm for ICSI and 2) to determine if impaired clinical outcomes when using testicular sperm for ICSI can be related to a commonly lower available concentration in the sample when compared with that available in epididymal and ejaculated sperm samples.

DESIGN: Data were prospectively collected over a 4-year period for all patients (n=416) undergoing ICSI treatment with testicular- (n=62), epididymal- (n=81) or low-concentration (≥4 million/mL) ejaculated (n=273) sperm.

MATERIALS AND METHODS: ICSI was performed on all mature oocytes 6–10 hours after oocyte retrieval according to standard protocol and procedures in this laboratory. After ICSI, injected oocytes were cultured in a sequential G-1/G-2™ micro-drop culture system under oil in an atmosphere of 6% $C0_2$, 5% $O_2$ and 89% $N_2$. The endpoints analyzed are summarized in the table. Two-tailed t-tests and Chi-square analyses were applied to detect differences in the laboratory- and clinical end points.

RESULTS: There were no differences in the number of available mature oocytes, oocyte fertilization- or embryo cleavage rates when using testicular, epididymal or low-concentration ejaculated sperm for ICSI. The clinical results are summarized in the table. Differences observed in the implantation rates between testicular sperm and epididymal/ejaculated sperm were found not to be related to the sperm concentration.

CONCLUSION: Results obtained in this study suggest that patients with a choice between testicular and epididymal sperm for ICSI should opt for epididymal sperm. However, it seems that there would be no benefit in obtaining epididymal sperm if sperm can be produced in the ejaculate regardless of a low sperm concentration. The results further suggest that the lower implantation rates observed when using testicular sperm for ICSI is directly related to the immature source of the sperm, rather than the lower concentrations obtained in a typical testicular biopsy.

*Supported by:* None

**Clinical outcomes for ICSI with testicular- , epididymal- and low-concentration ejaculated sperm**

| | No. of Retrievals | Sperm Concentration (M/mL) | Patient Age ±SD | Number Embryos /Transfer | Clinical Pregnancies (%) | Ongoing Pregnancies /Deliveries (%) | Implantations (%) |
|---|---|---|---|---|---|---|---|
| **Testicular Sperm** | 62 | 0.5 | 34.0 ±4.6 | 2.4 | 26 (41.9) | 25 (40.3) | 44[a] (29.3) |
| **Epididymal Sperm** | 81 | 4.0 | 34.0 ±5.0 | 2.4 | 43 (53.1) | 42 (51.9) | 74[b] (38.7) |
| **Ejaculated Sperm** | 273 | 2.0 | 33.2 ±4.8 | 2.3 | 140 (51.3) | 138 (50.5) | 234[b] (36.7) |

[a,b]Numbers within columns with different superscripts are different. T-test; $\chi^2$, P<0.05.