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Papers we will be presenting at the ASRM meeting in Philadelphia next week!



This month I have chosen to focus the Newsletter on the three papers we will be presenting at the American Society for Reproductive Medicine Convention in Philadelphia (October 18th and 19th). These papers are the work of three outstanding Resident Physicians: Dr. Elliot Paul and Dr. Evan Eisenberg of the Long Island Jewish Urology

Greetings!

Welcome to our Newsletter! Our continued goal is to provide a forum for discussing exciting new developments, office research protocols and answers to frequently asked questions in male fertility, male and female sexual function and complementary approaches for Urologic disease.

Please e-mail me with any questions, comments or suggestions for future topics.

Impaired semen quality after treatment for testicular cancer: Implication for future fertility O-58



Sperm banking is usually thought of as providing "insurance" for the 30% of men treated with adjunctive therapy for testicular cancer who do not recover

spermatogenesis. However, little is known about the number of men whose treatment produces impaired semen quality. To quantify this group Dr. Sukkarieh retrospectively evaluated semen analyses in men with testicular cancer before and after completion of their treatment regimens.

Analyses were classified into four groups by count: normal (> 20 million/cc), oligozoospermia (5-20 million/cc), severe oligozoospermia (< 5 million/cc), and azoospermia (no sperm present).

In the pre treatment analyses 23 men (56%) had normal counts, 15 (37%) were oligozoospermic, 3 men (7%) were severe oligozoospermic, and no men were azoospermic. In the post treatment semen analyses 19 (46%) were normal, 6 (15%) had oligozoospermic counts, 11 (27%) were severely oligozoospermic, and 5 (12%) were azoospermic. In addition, there was a reduction of counts post treatment. Most notably is the development of severe oligozoospermia and

the Long Island Jewish Urology Residency Program and Dr. Troy Sukkarieh of the Residency Program of the Department of Urology of Stony Brook University.

Sperm banking is usually thought of as providing insurance for men undergoing cancer treatment that might render them sterile. However, little is known about the number of men whose treatment produces impaired semen quality. To quantify this group Dr. Sukkarieh retrospectively evaluated semen analyses in men with testicular cancer before and after completion of their treatment regimens. His findings give renewed impetus to banking sperm prior to gonadotoxic therapy.

Dr. Paul evaluates semen quality in post-orchietomy patients before and after radiation treatment for men diagnosed with testicular cancer. He examines the controversial issue as to whether men diagnosed with testicular cancer should cryopreserve sperm when only radiation therapy will be employed.

Dr. Eisenberg examines the critical issue of the presence of significant underlying medical disease in men presenting with infertility by identifying the percentage of patients with a cancer diagnosis who have had or are currently having fertility issues. His findings demonstrate that a significant number of men presenting with testicular cancer have had a history of subfertility and makes a strong case for comprehensive Urologic evaluation of all male partners of an infertile couple.

[Information about the ASRM meeting...](#)

azoospermia in men who had normal counts prior to treatment. Dr. Sukkarieh found: ·In men diagnosed with testicular cancer, there was a significant level of subnormal sperm counts prior to treatment. ·44% of men were found to have impaired sperm counts prior to treatment, but no man was azoospermic. ·Post treatment semen analyses showed a trend of decreased sperm counts. 54% of men had subnormal counts post treatment, with 12% having azoospermia.

Due to the nature of treatment of primary testicular cancer with orchietomy and possible adjuvant surgical, radiation, or chemotherapy, total sperm counts are likely to fall. A primary concern is not only the development of azoospermia, but also severe oligozoospermia, impacting future fertility. In our series the rate of severe oligozoospermia rose from 7 to 27%, and the rate of azoospermia rose from 0 to 12% post treatment. Therefore, this study strongly supports the need for cryopreservation of semen in all men with newly diagnosed testicular cancer no matter what the pre-treatment semen quality might be.

[Dr. Sukkarieh's Abstract... »](#)

Cryopreservation Prior to Radiation Therapy in Testis Cancer Patients: Is it Necessary? P-48



Controversy exists as to whether men diagnosed with testicular cancer should cryopreserve sperm. Some question the need to bank sperm at all when only radiation

therapy will be employed. In this study, Dr. Paul evaluated semen quality in post-orchietomy patients before and after radiation treatment for men diagnosed with testicular cancer (seminoma).

A retrospective review was performed of patients with clinical stage I testicular seminoma, seen initially between April, 1997 and July, 2003 with a diagnosis of unilateral testicular seminoma. The fourteen patients that met these criteria had an age range of 27-46 years and a mean age of 38.5

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years. Eleven of the 14 (79%) included patients had abnormal semen analyses prior to initiating radiation. Two of these patients (14%) demonstrated an improvement in their semen analyses after receiving radiation therapy. Of the nine patients (65%) who demonstrated worsening of their semen analyses after radiation, seven (50%) had pre-radiation abnormalities which worsened after therapy, one of which later returned to its pre-radiation baseline.

Dr. Paul concluded: ·Patients diagnosed with testicular seminoma often demonstrate poor quality and low volume semen analyses prior to initiating radiation therapy. ·Radiation therapy appears to further worsen semen quality in the majority of patients undergoing radiation treatment for testicular seminoma. · Pre-orchietomy cryopreservation and, if possible, additional specimens after orchietomy and prior to radiation therapy should be recommended in all men diagnosed with testicular seminoma.

[Dr. Paul's Abstract....](#) »

Subfertility in cancer patients at initial sperm banking consultation P-122



A widely referenced paper, Honig et al (Fertile. Steril, 62:1028, 1994), demonstrated that 2-3% of men presenting for fertility evaluation had a significant medical pathology, primarily cancer. In addition, patients already diagnosed with cancer often present to fertility specialists for sperm banking, prior to surgery,

radiation, or systemic chemotherapy. Dr. Eisenberg took a complementary approach to identify the percentage of these patients presenting with a cancer diagnosis who already have had or are currently having fertility issues.

He reviewed the charts of 144 consecutive patients for evidence of primary or secondary infertility prior to initial cancer diagnosis. In addition, total sperm count, motility and morphology was analyzed.

Dr. Eisenberg found: 9 patients (6.4%) presented at initial consultation with the history of primary or secondary infertility. The semen analysis at initial consultation revealed abnormal total sperm count, motility and morphology in 55 (39%), 74 (52.8%), and 78 patients (58%, six patients were missing morphology data), respectively. 96 patients were either unmarried or had never attempted conception.

6.4% of patients in this study presenting with cancer had already had fertility concerns. This is twice the number found in Honig's et al's paper. In addition, patients with testicular cancer have significant long term fertility concerns due to the surgery and subsequent therapy (i.e. radiation or systemic chemotherapy. This demonstrates the need for a comprehensive evaluation of the male partner of a subfertile couple. Considering the significant abnormalities we discovered on the initial semen analysis and finding that 68% of patients in this study were either unmarried or had never attempted conception, the case is again made that sperm banking should be encouraged.

[Dr. Eisenberg's Abstract...](#) »

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