

May 2005

Volume 8 Issue 1

## Bruce R. Gilbert, MD, PhD, PC Newsletter

### In this issue

- **[Patient Guide for Testicular Implants now online](#)**
- [Sperm Banking Improves Sperm Function](#)
- ['Sharing The Dream Program' Exceeds Expectations!](#)
- [More Female Offspring with Fighter Pilots?](#)

### 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.

I appreciate all the great suggestions I continue to receive. Please e-mail me any questions, comments or suggestions for future topics.

The views expressed are our own and may not be appropriate for your particular situation. Please discuss all information with your physician. In addition, references given are for illustrative purposes only and also need to be evaluated by your treating physician to see if they are applicable.

### **[Sperm Banking Improves Sperm Function](#)**

### **[Patient Guide for Testicular Implants now online](#)**



Several studies have described the negative psychological effects of the loss or absence of a testicle.

These and other studies have suggested that testicular implants (also called testicular prostheses) lead to improved body image and are associated with a high level of patient satisfaction. I have compiled an online (and downloadable) guide to give my patients information on testicular implants.



Stanford University investigator Stewart McCallum, MD reported at the 2005 Meeting of the American Urological Association in San Antonio that cryopreservation

of sperm (aka sperm banking) increased hyaluronan binding...a critical step in fertilization.

The ability to bind hyaluronan...the main component of the oocyte (egg) cumulus matrix (outer covering)...is a characteristic of the sperm plasma membrane.

In their study 36 patient specimens had an average 9% increase ( $p=0.002$ ) in hyaluronan binding. These findings further support sperm banking prior to radiation or chemotherapy and suggest a possible mechanism by which cryopreservation of sperm might actually improve sperm function.

[Additional Information on Sperm Banking... »](#)

Topics covered:

History

The controversy behind silicone prostheses

Indications for Implantation

Alternatives to Implantation of a Testicular Prosthesis

Contraindications to Implantation of a Testicular Prosthesis

Types of implants currently available

Surgical considerations

Preoperative preparation

Specifics about the procedure

Postoperative care

Considerations about the procedure

Possible side effects

Patient Satisfaction with the device  
Safety

Effectiveness

What to do next?

[Online Patient Guide on Testicular Prosthesis...](#)

**Quick Links...**

- [Register for the Newsletter!](#)
- [Newsletter Archives](#)
- [Ongoing Clinical Research](#)
- [Medical Practice Website](#)
- [New York Cryo Website](#)
- [Vasectomy Reversal Website](#)

**'Sharing The Dream Program' Exceeds Expectations!**



Patients with cancer and other medical conditions that might impair their fertility have little opportunity to prepare for the immediate high costs of their disease, let alone for procedures or treatments intended to preserve the possibility of conceiving with their own sperm. These

patients have a brief window of opportunity between diagnosis and treatment in which they may pursue these options, and the upfront costs are for some prohibitive.

The goal of the New York Cryo's SHARING THE DREAM program is to increase access to sperm banking for qualified men diagnosed with cancer or any other medical condition whose treatment might impair fertility. We are pleased to report that we now have six patients enrolled in the program.

....and its FREE to qualified Applicants. Please see the link below for complete information about the 'Sharing The Dream' Program.

New York Cryo is a New York State Licensed and AATB (American Association of Tissue Banks) accredited reproductive tissue bank located in Great Neck, New York, and is dedicated to providing compassionate care to men requiring long term sperm banking and other andrology services.

[About the 'Sharing The Dream' Program... »](#)  
**More Female Offspring with Fighter Pilots?**



A concerned father writes: My son is a fighter pilot...he flies an F-15 Strike eagle...the men



in his squadron  
are having more  
girl babies..69%

girls to 31% boys. Is there a relationship between their work and the preponderance of female offspring? There is no clear answer. However, I offer the following for consideration:

From the Australian Department of Defense:  
"Large studies of fertility in pilots are limited. Responses to questionnaires distributed to pilots of the German Federal Armed Forces suggest that there is no gender bias in the offspring of transport pilots. During the first 1000 flying hours of their careers, there was an over-representation of male offspring to jet pilots, which reversed after 1000 logged flying hours. However, there is a severe limitation to studies of this nature imposed by the numbers of offspring required to provide suitable statistical power. Calculations suggest that about 2000 offspring of these men are needed to obtain valid answers. Jequier has reported oligospermia (decreased sperm number) in a fast jet pilot that reverted to normal once flying duties were ceased. It was hypothesised that G-forces induced a varicocele-like situation, and possibly even testicular ischaemia, although this could not be proven. Attempts at a wider study were abandoned due to the small numbers, both of pilots and their offspring, available for investigation (Anne Jequier, personal communication)." Also: "Unfortunately, there have been so few systematic studies with appropriate design that the effects of military service on spermatogenesis, or on fertility in general, are still not clear. As with many environmental influences, extreme levels of hyperbaric pressure, G-force and exposure to radiation may have detectable biological effects on the semen. However, the basic questions asked by servicemen cannot satisfactorily be answered at the present time."

A study by Little, B. B., C. H. Rigsby, and L. R. Little entitled Pilot and astronaut offspring: possible G-force effects on human sex ratio. Aviation Space and Environmental Medicine 58:707-709 concludes: "Ratio of male to female offspring in tactical pilots and astronauts who experienced G forces was compared to that of pilots and non-rated officers who were not exposed to such conditions. In the analysis presented here we found 62 pilots and astronauts

exposed to higher G forces had a significantly lower ratio of males to females in their offspring (.40) than did 220 pilots and non-pilots who were not exposed to high G forces. Other studies have also reported a decreased sex ratio in offspring of men exposed to high G forces. Reduction in number of males produced by fathers routinely exposed to comparatively high-G stresses may be related to G-force effects on sperm. This study suggests high-G exposure may affect the reproduction process."

Another study by Goerres HP, Gerbert K. contradicts the previous one, saying: "An old rumor - lately substantiated by statistical examinations from England - to the effect that pilots of high- performance military aircraft are "girl-fathers", could be reduced to absurdity through a comprehensive questionnaire investigation in the German Federal Armed Forces. Spermiogenesis does not seem to be disturbed by professional-specific influences (Radar radiation, G-forces etc.), as implied by the questionnaire findings. In times of high flying and personal stress (first 1000 flying hours) military jet pilots are even "boy-fathers". As soon as flying becomes a routine matter (after the 1000th flying hour) and thus less stressful, jet and helicopter pilots even become "girl-fathers". Aviat Space Environ Med. 1976 Aug;47(8):889-92

[For more information.....](#) »

**email: [bruce.gilbert@verizon.net](mailto:bruce.gilbert@verizon.net)**  
**voice: 516-487-2700**  
**web: <http://www.BruceGilbertMD.com>**

Bruce R. Gilbert,MD,PhD,PC • 900 Northern Blvd. • Suite 230 • Great Neck • NY • 11021

[Forward email](#)

 [SafeUnsubscribe™](#)

This email was sent to [bruce.gilbert@verizon.net](mailto:bruce.gilbert@verizon.net), by [Bruce R. Gilbert,MD,PhD,PC](#).  
[Update your profile](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Powered by  
  
**Constant Contact®**  
TRY IT FREE