

#### MEDICAL UPDATE

## Semen Analysis at Shady Grove Fertility

#### The SGF Difference and Interpreting Results

Infertility affects men as often as women. In fact, male factor is the cause of infertility in 40 to 50 percent of couples. Both partners should have their fertility tested at the same time, and fertility treatment should not begin until a diagnosis is established.

WHEN TO REFER for semen analysis



After **1 year** unprotected intercourse with a female partner **under age 35.** 

After 6 months with a female partner age 35 to 39.

After **3 months** with a female partner age **40 and over.** 

Immediately if suspected sperm issue such as testicular trauma, erectile dysfunction, or problems ejaculating.

### WHY SGF



SGF performs over 20,000 semen analyses and sperm washings each year. Each sample individually reviewed by experienced andrologists. Computerassisted semen analyses

assisted semen analyses (CASA) commonly performed in other labs are less accurate.

Offered at most SGF full-service locations: ShadyGroveFertility.com/ locations

#### DISCUSSING RESULTS with your patient



Receive SGF Andrology results within 3-5 business days after patient visit.

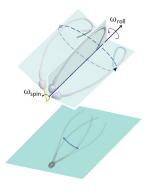
Male factor infertility is treatable.

Lifestyle changes can improve sperm health.

Review details below for general recommendations.

Advise on fertility consult if needed.

#### New Research May Expand Male Factor Infertility Treatment Options



A new 3D microscopy study on sperm motility has overturned hundreds of years of reproductive science, and may open new opportunities to treat male factor infertility. An international team of researchers from the University of Bristol in England and the

Universidad Nacional Autonoma de Mexico found that sperm tails actually only move in one direction and that the head of the sperm independently rotates in a cork-screw like motion in the opposite direction of the tail, allowing the whole cell to move forward in a straight line.

"The more accurately scientists can understand the fundamental molecular biology of sperm motility, the better doctors may be able to address motility issues associated with infertility," says Cori Tanrikut, M.D., one of SGF's reproductive urologists. Dr. Tanrikut hopes that knowledge gained from future work in the field will help her offer patients less aggressive fertility treatment options, or even improve their chances of conceiving without assistance.

Source: Smithsonian Magazine

Normal Range - Refer to chart below when reviewing semen analysis results with your patient:		General Recommendations		
		All parameters within normal range	<ul> <li>Refer to REI based on infertility cofactors</li> <li>Infertility ≥ 12 months with a female age &lt; 35 OR ≥ 6 months with a female age ≥ 35</li> <li>Other suspected sperm issue (i.e., testicular trauma, erectile dysfunction)</li> <li>Other female factors (i.e., tubal, uterine, anovulation)</li> </ul>	
Semen Analysis Reference Limit Values Based on the WHO Laboratory Manual, 5th Edition				
Volume	≥ 1.5 ml	Abnormality in 1 or more of the semen analysis parameters listed above         5 mil/ml         Volume ≤ 1.5 ml	Repeat semen analysis in 30 days and refer to REI or Urology.	
Count	≥ 15 mil/ml			
(million/ml)	> 400/		Consider incomplete collection. Repeat semen analysis in 30 days.	
Motility (%)	≥ 40%	WBCs ≥ 1.0 x 106/ml	Consider semen culture and trial of antibiotics. Refer to Urology.	
Morphology	≥ 4%	Viscosity Moderate to Severe	Possible candidate for sperm wash with IUI. Refer to REI.	
Viscosity	Low-Moderate			

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# Treating Male Factor Infertility

Male factor infertility is highly treatable and may include:

- 1. Hormone optimization
- 2. Varicocele repair
- 3. Vasectomy reversal
- 4. In vitro fertilization (IVF) with intracytoplasmic sperm injection (ICSI)
- 5. Percutaneous epididymal sperm aspiration (PESA) or testicular sperm extraction (TESE)
- 6. Testicular microdissection



#### Lifestyle Changes to Improve Sperm Health

For patients with semen analysis results not favorable to natural conception, lifestyle changes such as tobacco cessation and changes in diet can be instrumental in improving sperm health. Other healthy changes that may help improve sperm quality and count:

- 1. Make physical fitness, healthy eating, and tobacco cessation a priority.
- 2. Reduce alcohol consumption.
- 3. Avoid frequent or long visits to saunas, steam rooms, and hot tubs.
- 4. Avoid placing laptop directly on lap.
- Consult a physician before trying any medication, including low testosterone medications, which have been found to cause low sperm count.