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| **HeHealthPartners/GHI**  **HPLOGO-only** | |
| **Subject** Post-Vasectomy Semen Analysis Procedure – HealthPartners St. Paul | **Attachments**  No |
| **Key words –** | **Number**  GHI-PC-CL-HE-PVAS v. 12 - 2013 |
| **Category**  Provision of Care (PC) | **Effective Date**  January 2015 |
| **Manual** Clinic Laboratory Procedure Manual | **Last Review Date**  December 2012 |
| **Issued By** – Clinic Laboratory-Laboratory Technical Consultants | **Next Review Date**  December 2014 |
| **Applicable**  Clinic Laboratory Staff: HealthPartners St. Paul Laboratory | **Origination Date**  July 2001 |
| **Retired Date** |
| **Review Responsibility** Laboratory Technical Consultants | **Contact** Laboratory Technical Consultant |

# Purpose/ Principle

This procedure provides instruction for performing the post-vasectomy semen analysis. Semen is a composite solution formed by the testes and the accessory male reproductive organs. It consists of spermatozoa suspended in seminal fluid. Examination of the semen is performed as a recheck after vasectomy.

# Patient Information

1. Patient is given written instructions and a sterile urine container for specimen collection.
2. Abstinence from sexual intercourse is recommended for at least 48 hours prior to collection
3. Samples should be analyzed no sooner than 12 week after the vasectomy. 12-16 weeks after the vasectomy is recommended.

# Specimen Information

1. A total sample of semen ejaculate is collected by masturbation into a sterile urine container.
2. Specimens collected into a condom are unacceptable
3. Lab personnel accepting the specimen must ask and document the patient time of specimen collection
4. **Preferred:** Specimen should be received as soon as possible after collection and ideally within 60-90 minutes.
5. **Rejection Criteria:** Specimens received > 2 hours after collection are not acceptable due to the impact on sperm motility.
6. Specimen should remain at room to body temp (approximately 20-37oC) and processed immediately upon receipt or once liquefaction has occurred.

# Reagents/Equipment/Supplies

1. Glass slides
2. Cover slips 22x22 mm coverslips
3. 10 ul pipette
4. Disposable plastic pipette tips
5. Microscope

# Quality Control

N/A

# Procedure

1. When semen is ejaculated in a liquid form, it quickly becomes a gel or coagulum. It usually liquefies again in 10-30 minutes. Once liquefaction has occurred, mix specimen by gently swirling the primary collection container.
2. Pipette a 10 ul aliquot of semen onto a glass slide and coverslip with 22x22 mm coverslip. Examine the entire coverslip at 40X in a grid like search pattern.
3. Evaluate sample for sperm motility and for the number of sperm present in the aliquot.
4. If there are >100 sperm present, scan the entire slide to verify that no motile sperm are present (If motile sperm are present, do not count the non-motile sperm; just report as “motil sperm present).
5. If there are more than 100 sperm (and no motile sperm) on the slide, the sample may be diluted up to 1:10 with saline. Motility must be assessed on the undiluted sample.
6. If the sample is diluted, multiply by the dilution factor before entering the count in the computer.

**Reporting Results**

# If no sperm are seen, report as: “No Sperm Seen”

1. If motile sperm present, report as: “Motile Sperm Seen”
2. If non-motile sperm are present, report as: “Non-motile sperm Seen”

* Enter the number of sperm present in the 10 ul aliquot. The LIS will convert the value to # sperm/ml
* If >1000 sperm are present in the 10 ml aliquot, the LIS will report it as >100,000

# Interpretations/Results

To ensure the success of the vasectomy procedure, it is recommended that one specimen show no sperm or <100,000 nonmotile sperm/ml.

# Reference Ranges (Expected Values)

No Sperm Present or <100,000 nonmotile sperm/ml

**Calculations: (Use only if LIS is unavailable)**

# sperm seen in 10 ul x 100 = # sperm/ml

**References:**

American Urologic Association Vasectomy Guideline Statement

British Andrology Society Guideline for the assessment of post vasectomy samples 2002

**POST VASECTOMY CHECK**

Order Code: **PVC**

**RESULTING:**

**WORKSHEET:**

Function MEM worksheet S\_ \_ for the HP sites and worksheet SCM1 for SC.

**RESPONSE:**

**CODE NAME RESPONSE**

**WHERC** Where Collected **ONSIT** = On Site, **OFFSIT** = Off Site

**ABSTI** Days of Abstinence **Enter Days** (2,5,8 etc)

**AFORM** Abstinence Form Received **Y** = Yes, **N** = No

**TIMEP** Time Test Performed **Enter Time Free Text** (;0900 etc)

**PVCS** Post Vasectomy Sp Count **MSPE, NSPE**  or **NOSPE**

**NOSPE** = No Sperm Seen

**MSPE** = Motile Sperm Seen

**NSPE** = Nonmotile Sperm Seen

**VCSP** Vasectomy Sperm Count **NUMBER** = Enter number of sperm counted

This is a suppressed component.

**VCSP2** Vasectomy Sperm Count Results will be displayed and will flag if abnormal at this prompt.

**ADDITIONAL INFORMATION:**

At the **PVCS** prompt if you result with **NSPE** make sure you answer the **VCSP** prompt with a number do not <cr> past otherwise it will answer with HIDE and you should reject and re-enter your results. Results will file into the **VCSP2** prompt when **VCSP** is resulted.