 UnityPoint Health PROCTOR HEMATOLOGY LABORATORY	Page 1 of 4	Section: UPPHEMO	Policy #: 15
	Approved by: see signature block at end of document		Date: 3/21/18 Review by: 7/19/21
	Policy Created: 8/18/89		
	Supersedes: 3/21/18		
	Primary Responsible Parties: Sheanea LaCock Secondary Responsible Parties: Ron Fitzgerald		
CAP Standard: NA			
SUBJECT: POST VASECTOMY SEMEN ANALYSIS MANUAL METHOD			

SEMPV

I. CLINICAL SIGNIFICANCE

Examination of seminal fluid is performed as part of the verification of a successful vasectomy.

II. SPECIMEN

Seminal Fluid

III. POLICY SCOPE

The scope of this policy applies to all Laboratory staff that prepares or performs testing on laboratory specimens at UnityPoint Proctor.

IV. REAGENTS

See Semen Analysis

V. INSTRUMENTATION/EQUIPMENT

- Plastic Pipette
- Glass Slide
- Glass Cover Slip
- Plastic Pour Off Tube
- Serological Pipet
- QwikCheck™ Test Strips for semen WBC and pH
- QwikCheck™ Liquefaction Kit

VI. PROCEDURE:

1. The laboratory receptionist will provide the patient with the instructional form for collection along with a Semen Analysis Work Form and labeled plastic container.
2. Collection of the sample takes place in the large lab restroom.

3. Our receptionist will deliver the specimen and the completed work form to Hematology immediately after collection.
4. Use the work form located in the procedure manual to record all results before entering them into Sunquest.
5. Make sure that the laboratory receptionist has completed the time collected. The sample should be room temperature. If the specimen container feels below room temperature from transportation in the cold, take the temperature and document this on the report.
6. Allow the specimen to sit on the counter for 30 minutes, so that the sample can liquefy and be mixed thoroughly. After 30 minutes has elapsed from the time of collection, the sample is checked for liquefaction. If the specimen is not liquefied, allow another 30 minutes for liquefaction to complete. If the specimen is not liquefied in 60 minutes, report liquefaction as abnormal. Before any further testing is begun, the sample should be thoroughly mixed in the container.

Appearance: Record the appearance of the sample. Normal semen is opaque white to gray white. Note the presence of blood, other pigmentation, gelatinous clumps, mucous clumps, or trichomonas, odor or any abnormal characteristic or contaminant. Microscopic characteristics such as erythrocytes and white blood cells should also be reported.

Viscosity: Determine the viscosity of the sample by gently aspirating the sample into a pipette and allow the semen to drop by gravity. Observe the length of the thread formed. The longer the thread the more viscous the sample. A normal semen specimen will be expelled from the pipette in distinct drops. Grade as normal or abnormal. If the sample is hyper viscous, chymotrypsin may be added to the sample to aid in liquefaction. See the Liquefaction Kit package insert for instructions. The sample should be looked at before 60 minutes post collection.
7. WBC concentration and pH: remove a QwikCheck test strip from the bottle and tightly cap the bottle. Mix the semen sample thoroughly. Using a pipette, place one drop of the specimen on each test pad (pH and Leukocytes). Do not touch the test pad areas and leave the strip in a horizontal position. Wait 1 minute to read leukocytes and pH. Compare the color of the test pad to the appropriate color scale for pH and WBC on the bottle label. Note: test pads will grow darker if read after 1 minute. WBC should only be reported as >1 M/ml if the test pad is a dark purple color.
8. Measure the volume of the sample using a disposable serological pipette.
9. Take an aliquot of the well-mixed sample. Label the aliquot with the patient name and accession number. Place a drop of the specimen on a slide and examine the entire slide microscopically for the presence of any sperm. If no sperm are seen, centrifuge the specimen in the Coagulation centrifuge. Examine the pellet microscopically for the presence of any sperm.
10. If many sperm are seen, convert the post vasectomy profile into a Semen Analysis for fertility and perform a sperm count. See the Semen Analysis procedure in this procedure manual.
11. When all results are complete and recorded in Sunquest, order a YPATHR and give the specimen, cumulative Report and work form to Histology. Histology will perform a concentrating technique. Slides are prepared from the sediment for the pathologist to review and add an interpretive comment. A PAP stain is used to distinguish leukocytes from immature sperm or other round cells.
12. If Histology is gone when you deliver the specimen, store the sample in the refrigerator and put the paperwork on the counter.

VII. Interpretation:

In the Post-Vasectomy semen analysis, the major concern is the presence or absence of spermatozoa.

The length of time required for complete sterilization to occur can vary greatly among patients and depends on both time and the number of ejaculations. It is not uncommon to find sperm in a post-vasectomy specimen and even one sperm should not be overlooked.

VIII. Reference Intervals:

Normal is no sperm seen

IX. REPORTING RESULTS


1. Select Result Entry
2. Manual Mode
3. Configuration Mode: YSEMEN PRP SEMEN ANALYSIS
4. Click Result
5. The Accession number is ready to result.
6. ABSTIN: Number of days since last ejaculation
7. SPAPP: Semen appearance: Normal or abnormal
8. VISCO: Enter semen viscosity: Normal (within one hour) or abnormal (>1 hour)
9. LIQUE: Normal or abnormal.
10. SPPH: Semen pH
11. SQWBCC: WBC concentration (M/ml). See Semen Analysis Manual Method procedure and package insert for instructions.
12. PVMOT: HIDE
13. PVIMM: HIDE
14. PVTOM: HIDE
15. PVMOTO: HIDE
16. PVIMT: HIDE
17. PVTOT: HIDE
18. SPCOMM: If no sperm seen in a concentrated specimen, enter NOSPI
If few sperm are seen, comment ;“Rare sperm seen on concentrated specimen”
If many sperm were seen, then convert to SEMEFE

X. REFERENCES:

- Urinalysis and Body Fluids, Susan King Stasinger, pp. 158-162.
Urinalysis and Body Fluids A ColorText and Atlas, Ringsrud and Linne, pp. 206-213.
Body Fluids, 3rd Ed., Kjeldsbert and Knight
Atlas of Sperm Morphology, M. Adelman, E. Cahill, 1989, pp. 2-13.
WHO Laboratory manual for examination of human semen, 5th Edition 2010

REVISION HISTORY			
Rev	Description of Change	Author	Effective Date
0	Updated to UnityPoint formatting	Cindy Schroeder	1/22/16
1	Revised result reporting to reflect changes in Sunquest; added WBC and pH testing	Sheanea LaCock	7/19/19

REVIEWED BY

Lead	Date	Coordinator /Manager	Date	Medical Director	Date
Sheanea LaCock	3/9/18	Ronald P. Fitzgall	3/21/18		3/21/18
Sheanea LaCock	7/19/19				

