JULY, 2017

THE University of Vermont MEDICAL CENTER

Pathology & Laboratory Medicine Communiqué

IN THIS ISSUE

PATIENT INSTRUCTION BROCHURES

We have several brochures for patients that need to collect samples at home. The following are available online by visiting *UVMHealth.org/MedCenterLabServices* or you can contact Lab Customer Service to receive some via mail.

- Feces Sample Collection
- Fecal Occult Blood Collection
- Sputum Sample Collection
- Urine Sample Collection

LAB OPERATIONS

Summer Holiday Phlebotomy Hours

Laboratory Collection Site	Monday July 3	Independence Day Tuesday, July 4,	Labor Day Monday, September 4
Main Campus	7 am - 6 pm	Closed	Closed
Fanny Allen MOB	6:30 am - 3 pm	Closed	Closed
One So. Prospect	7 am - 3 pm	Closed	Closed
Blair Park	Closed	Closed	Closed

Regularly scheduled hours will apply to any days not specifically addressed above, please call 847-5121 or 1-800-991-2799 for assistance.

For Patient Service Center Locations, see page 11.

Laboratory Client Satisfaction Survey

Please take the time to fill in our **brief survey** about the laboratory services we provide to you. Responses are confidential unless you chose to leave your name. We welcome your comments and suggestions.

Anderson, Scott, MD
Program Directory
Pathology Residency Program
(802) 847-5121

Preparing for a Pap Test: Information for Your Patients

To ensure that the Pap Test is most effective, patients should follow the following guidelines:

- Try not to schedule a Pap Test during your menstrual period. Although the test can be done, it's best to avoid this time of your cycle, if possible.
- During the two days prior to the Pap test AVOID:
  - ◯ Intercourse
  - ◯ Douching
  - ◯ Any vaginal medicines or creams
  - ◯ Any birth control foams, creams or jellies
  - ◯ The use of tampons

Following these guidelines will decrease the presence of interfering factors in the Pap Test.

Scott Anderson MD, Medical Director, Cytopathology
Department of Laboratory Medicine, UVMMC
Associate Professor of Pathology and Laboratory Medicine, UVM

TEST UPDATES

Laboratory Automation in Motion

The Clinical Laboratory has begun a major project toward total laboratory automation. This will affect pre-analytical, analytical and post-analytical operations and include a track system for connecting multiple testing systems as well as the introduction of a middleware software system (from Data Innovations, South Burlington, VT) to control sample flow from centrifugation to transport to testing, reporting and sample storage. This is an extremely large and complex project but we feel that the resulting increase in efficiency, patient safety and cost reductions are worth the investment. This project will be ongoing through the summer and we expect the project to be completed by **Fall 2017**.

As part of this project, the following test platforms will be affected: Cortisol, Dexamethasone Suppression Test, Thyroid Stimulation Hormone, T3-Total, T3-Free, T4-Total, T4-Free, Gentamycin, Valproate, and Vancomycin.

Test Changes

C1 ESTERASE INHIBITOR, FUNCTIONAL ASSAY

Effective 7/18/2017 Mayo Medical laboratories will no longer accept serum gel tubes for this test. Please submit a plain red top.

HSV TYPE 1 & 2 ANTIBODY IGG

Effective 6/30/2017 the day HSV Type 1 & 2 Antibody IgG is performed will change from Tuesday to Friday.

WRIGHT SMEAR FOR EOSINOPHILS

Due to low volumes the Wright Smear for Eosinophil's (Hansel Stain) will be discontinued effective 6/28/2017.

LYME ANTIBODY CONFIRMATION

Effective the week of 5/22/2017, the Chemistry Laboratory runs Lyme Western Blots on Tuesday and Friday.

Laboratory Testing Alternative for Patients Who Decline Colonoscopy

There are two testing alternatives for patients declining colonoscopy: DNA or serology testing. The two tests are comparable in how they work and in short, the DNA test has higher sensitivity but lower specificity over the serology. This means the DNA test has a higher rate of false positives requiring colonoscopy as a follow up. The Fecal Immunochemical Test (FIT) is less expensive for patients and is available with interfaced orders and results. Based on these findings, effective 6/28/2017, FIT will be offered at UVMMC as an alternative for patients declining colonoscopy.

The test will not be performed here at UVM but sent out to our laboratory partner, Mayo Medical Laboratories. It will be orderable in Prism and the Laboratory systems. There is a specific collection kit that we will stock in both UVM Adult Primary Care and Family Practice locations. The kit contains collection instructions for patients and should be returned to the doctor's office for transport to the UVM lab.

The kits will also be available as a supply item from the laboratory for other sites interested in performing the test.
The kits have a short outdate and a maximum of 5 per site will be available at a time.

REFERENCE

Ravi B. Parikh, MD, MPP; Vinay Prasad, MD, MPH . Blood-based Screening for **Colon Cancer. A Disruptive Innovation or Simply a Disruption? JAMA. 2016; 315(23):2519-2520**

NOTE

The other alternative (not offered through UVMMC) is the Cologuard test. Many patients have heard of this test as it is marketed directly to consumers. It is a DNA test and is offered only by Exact Sciences. Kits can be obtained by patients with a valid order, by visiting their web site, and then mailing the kit back. It is a proprietary process from which the lab is excluded.

If you have patients who are interested in this alternative we understand that the out of pocket expense for patients ranges from
$0-$650, depending on patients insurance. In addition, results would need to be scanned into the patients chart once you received then from Exact Sciences. Here is the link to their website for patient information
http://www.cologuardtest.com/get-a-prescription/talk-to-your-doctor

John Lunde, MD
Medical Director
Hematology
(802) 847-5121

Kleihauer-Betke Testing Changes Based on Clinical Indication.

Change was effective Monday June 12, 2017

The Hematology Laboratory performed an audit of Kleihauer-Betke (KB) testing over the last three years to determine the ordering habits, turnaround times, and clinical impact of this test. Based on these findings, a review of current Obstetrical literature/guidelines, and discussions with the Obstetrics and Gynecologic Department at the University of Vermont Medical Center, the following changes were made to optimize the utilization of KB testing:

1. Testing will no longer be offered or performed between 11 pm and 7 am. Testing will continue to be offered routinely 7 am to 3:30 pm Monday through Friday. All weekend and evening testing received after 3:30 pm Monday through Friday will require pathology approval to be run during off-hours.
2. Maternal Rh status and testing indication should be provided with each order.
3. If the patient is Rh (-) a fetal screen should be initially ordered. A Kleihauer-Betke will automatically be reflexed and run on all positive fetal screens.

(Continued on page 6)

C. Wojewoda, MD
Medical Director
Microbiology
Phone: 847-5121

Microbiology Specimen Stability Changes

Effective Monday, May 22, all Microbiology culture test entries have specimen stability and transport requirements added to our test catalog. Adherence to transporting specimens under the appropriate conditions in a timely manner is best practice and can avoid bacterial overgrowth in non-sterile samples. Samples not adhering to laboratory requirements will be rejected.

Test Name	Sunquest	Transport Instructions
AFB Culture & Smear, CF	CFRTCS	Samples must be received within 48 hours of collection.
AFB Culture, Other	TC	Samples must be received within 48 hours of collection.
AFB Culture, Respiratory	RTC	Samples must be received within 48 hours of collection.
AFB Culture, Respiratory &	RTCS	Samples must be received within 48 hours of collection.
AFB Culture, Urine	UTC	Samples must be received within 48 hours of collection.
AFB Smear Only, Other	AFSM	Samples must be received within 48 hours of collection.
Anaerobic Culture, (includes	BNACS	Deliver to the lab immediately
Anaerobic Culture, (includes	FACS	Deliver to the lab immediately
Anaerobic Culture, (includes	ACS	Deliver to the lab immediately
Anaerobic Culture, (includes aerobes), Resp & Smear	RACS	Deliver to the lab immediately
Anaerobic Culture, (includes	TACS	Deliver to the lab immediately
Bacterial Culture Blood/Bone	BRC	Deliver to the lab immediately
Bacterial Culture,	BONECX	Deliver to the lab immediately
Bacterial Culture, Fluid &	FRCS	Deliver to the lab immediately
Bacterial Culture, Other & Smear (C+S)	RCS	Samples must be received in lab within 24 hours of collection.
Bacterial Culture, Resp/Sputum & Smear (C+S)	RRCS	Samples must be received in lab within 24 hours of collection.

Continued on page 5

Test Name	Sunquest Order Code	Transport Instructions
Bacterial Culture, Solid Object	SORC	Samples must be received in lab within 24 hours of collection.
Bacterial Culture, Tissue & Smear (C+S)	TRCS	Deliver to the lab immediately
Bacterial Culture, Urine	URC	Deliver to the lab immediately. Can be refrigerated up to 24 hours.
Blood Culture, Dialysis	BRCD	Deliver to the lab immediately
C. dfficile, PCR	CDIFBD	Sample should be submitted in a sterile container. Samples must be received within 24 hours if it is at room temp or 5 days if refrigerated.
Culture for Staphylococcus Coagulase Positive*	STAPCX	Samples must be received in lab within 24 hours of collection.
Cystic Fibrosis Respiratory Culture & Smear (C+S)	CFRESP	Samples must be received in lab within 24 hours of collection.
Cystic Fibrosis Respiratory Culture, Swab	CFSW	Samples must be received in lab within 24 hours of collection.
Fecal Bacterial Pathogens By PCR	FECBD	Must be received in lab within 2 hours if submitted in sterile container. Acceptable in Cary Blair media for 4 days.
Fecal Lactoferrin for WBC	FELF	Sterile container that is refrigerated must be received within 2 weeks of collection.
Feces Culture Unusual Pathogens	FECCX	Must be received in lab within 2 hours if submitted in sterile container. Acceptable in Cary Blair media for 4 days.
Fungus Culture, Other	FC	Samples must be received within 48 hours of collection.
Fungus Culture, Other & Smear	FCS	Samples must be received within 48 hours of collection.
Fungus Culture, Skin, Hair or Nail	FCSK	Samples must be received within 48 hours of collection.
Fungus Culture, Skin, Hair or Nail, & Smear	FCSKS	Samples must be received within 48 hours of collection.
Fungus Culture, Tissue	TFC	Samples must be received within 48 hours of collection.
Fungus Culture, Tissue & Smear	TCS	Samples must be received within 48 hours of collection.
Fungus Smear, Oral or Genital	FSM	Samples must be received within 48 hours of collection.
GC Screen Culture	GC	Deliver to the lab immediately
Group B Strep, PCR	SXBBD	Samples must be received in lab within 24 hours of collection.
Legionella Culture, Other	LC	Samples must be received in lab within 24 hours of collection.
MRSA PCR	MRSBD	Samples must be received in lab within 24 hours of collection.
Occult Blood, Feces, Diagnostic	OCCB	Inoculated cards at ambient temperature must be received within 2 weeks of collection.
Pharyngitis Culture	THSC	Samples must be received in lab within 24 hours of collection.

(***Kleihauer-Betke Testing*** *Continued from page 3)*

4. Any STAT orders or test requests on patients who are Rh (+) or Rh (-) without a fetal screen will be reviewed by a pathologist prior to running. Pathology may contact the ordering provider to discuss testing based on the following indications:

Recommended Indications

Definitely Indicated	Clinical Judgment	Not Indicated
RhIG (if positive fetal screen)	Maternal Trauma	External cephalic version
Fetal loss > 20wks	Neonatal Anemia	Non-traumatic abruption
Fetal hydrops	Cord blood sample	Vaginal bleeding
High clinical concern for massive fetal maternal hemorrhage with MCA dopplers		Fetal loss < 20 weeks

The Kleihauer-Betke (KB) test is designed to quantitate fetal red blood cells, but the results have been shown to be imprecise with a large coefficient of variation (CV). It is often utilized to quantitate large fetomaternal hemorrhages at the time of delivery in Rh (-) women for appropriate dosing of RhIG to prevent Rh alloimmunization. Although it can be used during pregnancy in both Rh (-) and Rh (+) women to detect fetomaternal hemorrhage, the evidence to support its utility are limited and results should be interpreted with caution. Thank you for your attention and for your cooperation with these changes.

Cystine Granulocyte Assay

CLINICAL APPLICATION

This test is used for diagnosis and treatment of Cystinosis, an inherited condition characterized by the accumulation of the amino acid cystine within cells. Excess cystine damages cells and often forms crystals that can build up causing problems in many organs and tissues. Symptoms include progressive kidney failure, retarded growth and vision problems. This test is used for initial diagnosis and then for therapeutic treatment monitoring for the life of the individual patient. Method Granulocyte Half-Cystine by Mass Spectrometry performed at University of California, San Diego, Biochemical Genetics and Cystine Determination Laboratory.

SPECIMEN COLLECTION

When testing for treatment monitoring the timing varies according to the drug used for treatment.

Drug	Sample Collection
Cysteamine (Cystagon)	Collect sample just prior to next dose (trough)
Procysbi	Collect sample 30 minutes after the dose (trough)

This test must be scheduled in advance through Laboratory Customer Service 847-5121 or 1-800-991-2799. Sample collection is only available at the main campus phlebotomy site or pediatric nephrology.

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CYSTINE GRANULOCYTE ASSAY SPECIMEN INFORMATION

SQ Order Code	CYSTIN
CPT	83789
Price:	Please contact Laboratory Customer Service for pricing information
Division:	Sent to University of CA, San Diego Biochemical Genetics Lab
Sample Requirements	Collect 8 mL ACD-A Tube (Yellow Top) submit whole blood. Deliver to lab ASAP. Sample must be refrigerated within 60 minutes.
Reference Range:	Interpretations accompany each report.
Days Performed:	Monday - Thursday before 2pm
Analytical Time:	5 - 7 days, not available STAT
Effective Date	**6/28/2017**

Gregory Sharp, MD
Medical Director
Clinical Chemistry
Phone: 847-5121

Thyroid Function Testing Methodology Change (TSH, Total T4, Free T4, Total T3, Free T3)

As part of the lab automation project, thyroid function testing will be moved from the Siemens Advia Centaur (Siemens Medical Solutions, Malvern, PA) to the Ortho Vitros 5600 (Ortho Clinical Diagnostics, Raritan, NJ) **effective June 28, 2017**. Correlations performed between the two instruments look very good, however, immunoassays for thyroid hormones can show a variation depending on the assay. We will therefore be changing the reference range to those of the manufacturer until we have enough experience with the assay to assess the reference ranges for our patient population.

An additional issue has recently been raised in a letter published in the May 2017 issue of Applied Laboratory Medicine [(1)]. This letter showed evidence that the Ortho assay had the potential for falsely elevated Total T3 measurements in pediatric patients. The authors suspected an endogenous antibody –based mechanism of interference. Such mechanisms have been previously reported. The authors emphasize the importance of evaluating the thyroid hormone concentrations in the context of other clinical and laboratory information. We are in the process of evaluating this issue, and will take appropriate action to alert users. Ortho Clinical Diagnostics is aware of this problem and the Total T3 assay is currently under investigation with the hope to have resolution in the near future (personal communication). It is important to emphasize that only the Total T3 is affected: TSH, Total T4, free T4, and free T3 do not have this issue.

The Free T4 sample type will change, **serum will be the only acceptable sample type**; heparinized specimens will be rejected.

If you have any questions concerning this change, please contact Dr. Greg Sharp in the Chemistry Laboratory 847-5121.

REFERENCE

1. Dickerson, JA, Polsky, TG, Greene, dn, Salehi, P Roberts, AJ, Jack, RM. False-Positive Total T3 Using the Ortho Vitros Immunoassay in Pediatric Populations. Letter, The Journal of Applied laboratory Medicine, 1 (6): 2017, 751-753.

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Thyroid Function Testing *Continued from page 7*

THYROID FUNCTION TESTING REFERENCE RANGE

New Reference Ranges 6/28/2017			Current Reference Ranges		
Thyroid Stimulation Hormone (TSH3)					
0-3 days	1.00-20.00 mIU/L		2 months – 1 year:	Males: 0.7 – 6.7	Females: 0.9 - 5.3
4 days-30 days	0.50-6.50 mIU/L		1 year – 2 years:	Males: 0.9 – 5.7	Females: 0.8 – 4.7
31 days-5 months	0.50-6.00 mIU/L		2 years to <12 years:	Males/Females: 0.64 – 6.27	
6 months-18 years	0.50-4.50 mIU/L		12 years to <18 years:	Males/Females: 0.51 – 4.94	**Units:** uIU/mL
≥18 years	0.47-4.68 mIU/L		>=18 years:	Males/Females: 0.55 – 4.78	
T3 Total (TT3)					
0-3 days	60-300 ng/dL		Infants: (1 to 23 months):	117 – 239 ng/dL	
4 days - 365 days	90-260 ng/dL		Children: (2 to 12 years):	105 – 207 ng/dL	
1 -6 years	90-240 ng/dL		Adolescents: (13 to 20 y):	86 – 192 ng/dL	
7 - 11 years	90-230 ng/dL		Adults: (>20 years):	60 – 181 ng/dL	
12 -18 years	100-210 ng/dL				
≥18 years	97-169 ng/dL				
T4 (TT4)					
0-3 days	8.0-20.0 ug/dL		Infants: (1 to23 months):	6.0 – 13.2 ug/dL	
4 days-30days	5.0-15.0 ug/dL		Children: (2 to 12 years):	5.5 – 12.1 ug/dL	
31-365 days	6.0-14.0 ug/dL		Adolescents: (13 to 20 years):	5.5 – 11.1 ug/dL	
1-5 years	4.5-11.0 ug/dL		Adults: (>20 years)	4.5 to 10.9 ug/dL	
6-18 years	4.5-10.0 ug/dL				
≥18 years	5.5-11.0 ug/dL				
T3 Free (FREET3)					
			Infants: (1 to 23 months):	3.3 – 5.2 pg/mL	
No Pediatric Reference Ranges			Children: (2 to 12 years):	3.3 – 4.8 pg/mL	
≥18 years	2.8-5.3 pg/mL		Adolescents: (13 to 20 years):	3.0 – 4.7 pg/mL	
			Adults: (>20 years):	2.3 – 4.2 pg/mL	
Free T4 (FRET4)					
0-3 days	2.0-5.0 ng/dL		Infants: (1 to 23 months):	0.9 – 1.4 ng/dL	
4 days - 30 days	0.9-2.20 ng/dL		Children: (2 to 12 years):	0.9 – 1.4 ng/dL	
30 days - 18 years	0.8-2.0 ng/dL		Adolescents: (13 to 20 y):	0.8 – 1.4 ng/dL	
≥18 years	0.8-2.2 ng/dL		Adults: (>20 years):	0.8 – 1.8 ng/dL	

Introduction of Celiac Disease Panel at UVMMC

On July 26, 2017, the Immunology Laboratory will offer a Celiac Disease Screening Panel for the initial evaluation of patients exhibiting symptoms of celiac disease. The panel consists of a total serum IgA and an anti-TTG IgA and will include a brief interpretive comment. These changes are the culmination of a quality improvement study performed in our laboratory and reflect best practice and published guidelines for testing.[1] As a consequence both the Celiac Disease Serology Cascade and the Celiac Disease Comprehensive Cascade may be ordered as a miscellaneous test from Mayo Medical Laboratories with pathology review.

Celiac Disease (CD) is a systemic immune-mediated disorder triggered by dietary gluten in genetically susceptible persons, affecting approximately 1% of the general population. CD is characterized by a specific serum autoantibody response and variable damage to the small-intestinal mucosa. Diagnosis of this disease can be elusive since patients can exhibit a broad range of clinical presentations.

Evaluation of patients for gluten-related disorders is a common presentation at primary care clinics. Greater numbers of patients are presenting to providers than in the past with questions and concerns about gluten sensitivity. The clinical presentation of patients with gluten-related disorders is variable and non-specific, with considerable overlap between entities. For this reason, laboratory testing is a critical component of the evaluation. Intestinal biopsy is the gold standard for diagnosis of celiac disease in the United States; however, laboratory testing is widely used as first line assessment for patients, and to select subsets of patients for referral to endoscopy.

Numerous serologic tests are commercially available. The most common tests include anti-endomysial antibodies (EMA), anti-transglutaminase antibodies (TTG), anti-deamidated gliadin peptide antibodies (DGP), and total serum IgA. Both IgA and IgG based methods are available. IgA-based methods in general provide highly sensitive detection for celiac disease, although the

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Cortisol Method Change

As part of a lab automation project, testing for cortisol will be moved from the Siemens Advia Centaur (Siemens Medical Solutions, Malvern, PA) to the Ortho Vitros 5600 (Ortho Clinical Diagnostics, Raritan, NJ) **effective July 19, 2017**. Correlations performed between the two instruments look very good. There will be a slight change in the reported reference ranges. The reference ranges for ACTH stimulation tests and dexamethasone tests will not change.

If you have any questions concerning this change, please contact Dr. Greg Sharp in the Chemistry Laboratory 847-5121.

Cortisol Reference Range

New Reference Range 7/19/2017	
AM	4 - 23 ug/dL
PM	2 - 14 ug/dL
Old Reference Range	
AM	4.3 - 22.4 ug/dL
PM	3.1 - 16.7 ug/dL

Gentamycin, Valproate, and Vancomycin Methodology Change

As part of the lab automation project, testing for gentamycin, valproate, and vancomycin will be moved from the Siemens Advia Centaur (Siemens medical Solutions, Malvern, PA) to the Ortho Vitros 5600 (Ortho Clinical Diagnostics, Raritan, NJ) **effective June 28, 2017**. There will be no change in Reference Ranges for these assays.

The vancomycin sample type will change, **serum will be the only acceptable sample type**; heparinized specimens will be rejected.

Reference Ranges June 28, 2017

Gentamycin	
Peak	5 - 12 ug/mL
Trough	<1.5 ug/mL
Valproate	
Therapeutic Range	50 - 100 ug/mL
Toxic	>150 ug/mL
Vancomycin	
Peak	25 - 50 ug/mL
Trough	10 - 20 ug/mL

(***Celiac Disease Panel*** *Continued from page 9)*

sensitivity and specificity of individual tests varies by method and among assays and may not be standardized between different labs. The positive predictive value of serologic methods is affected by the low prevalence of celiac disease in the general population. Genetic testing is available and includes HLA-DQ2/DQ8 typing methods such as polymerase chain reaction and sequencing.

Expert consensus guidelines for diagnosis of celiac disease have been published worldwide; however, few are evidence-based. The American College of Gastroenterology (ACG) published evidence-based consensus guidelines [(1)] in 2013 which state that the single best test for detection of celiac disease is the IgA anti-TTG in adults. Adding a total serum IgA test is recommended for patients in whom there is a possibility of IgA deficiency. IgG based testing may be used in special circumstances, and genetic testing should not be routinely used in the initial diagnosis of celiac disease. Importantly, all testing should occur when the patient is eating a gluten containing diet, and intestinal biopsy should be pursued even if serology is negative and clinical suspicion for disease remains high.

REFERENCES:

1. Rubio-Tapia A, Hill ID, Kelly CP, Calderwood AH, Murray JA. (2013). ACG Clinical Guidelines: Diagnosis and Management of Celiac Disease. Am J Gastroenterol; 108:656-676.

SPECIMEN INFORMATION

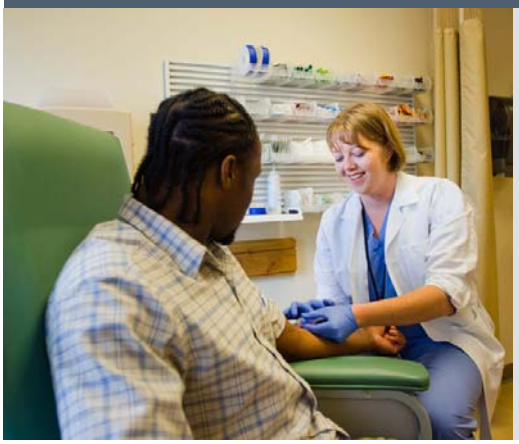
Celiac Disease Panel	
Test Code	CDP
Test Note	Testing includes Tissue Transglutaminase Antibody IgA, Serum IgA and an interpretation.
Sample Requirements	Collect 4 mL SST and submit 1.0 mL serum refrigerated, minimum volume is 0.6 mL. Serum is stable at 2-8 degrees C for up to 7 days, for longer storage freeze at minus 20 degrees C.
Interpretation	If TTAB positive (>10.0): "Celiac disease possible. Consider referral to gastroenterology specialist for consideration for biopsy." If IgA is age-specific normal and TTAB is equivocal (4.0-10.0): "Equivocal serology, celiac disease cannot be excluded. Referral to gastroenterology specialist recommended for additional evaluation." If IgA is age specific normal and TTAB is negative (<4.0): "Negative Serology. Celiac disease unlikely. Approximately 10% of patient with celiac disease are sero-negative. Patients who are already adhering to a gluten-free diet may be sero-negative. If celiac disease is highly clinically suspected, referral to gastroenterology for additional evaluation is recommended." If IgA is >7 mg/dl, but lower than age-specific normal and TTAB is negative or equivocal (<10.1): "Low total serum IgA; Recommend referral to gastroenterology specialist for additional evaluation." If IgA is below detection (<7 mg/dl) and TTAB is negative or equivocal (<10.1): "Total serum IgA deficiency; Recommend referral to gastroenterology specialist for additional evaluation." If TTAB negative or equivocal (<10.1) and age <1: "Celiac disease interpretation in children less than one year of age is difficult. Recommend referral to gastroenterology specialist for additional evaluation if clinically indicated."

Change in Acceptable Specimen Type for Vancomycin and Free T4

As part of the change in testing for Laboratory Automation, there will be a change in the acceptable specimen type to **serum only for vancomycin and free T4**. Heparinized plasma specimens can no longer be accepted. This change is effective June 28, 2017.

If you have any questions concerning this change, please contact Dr. Greg Sharp in the Chemistry Laboratory 847-5121.

LABORATORY PATIENT SERVICE CENTER



Main Campus
Main Pavilion, Level 2
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Burlington, VT

One South Prospect
1 South Prospect St
First Floor Lobby
Burlington, VT

Fanny Allen Campus
792 College Parkway
Colchester, VT

Adult Primary Care Williston
353 Blair Park Road
Williston, VT

Visit UVMHealth.org/MedCenterDrawSites for patient service center hours and special test considerations.

All UVM Medical Center phlebotomists are nationally certified

LABORATORY COMPLIANCE INFORMATION

The **Factor V Leiden** and **Prothrombin 2010A Gene Mutation** molecular-based assays are now sent to Mayo Medical Laboratories for testing. As a reminder, arrangements for payment must be made prior to ordering either of these tests in one of the following ways:

1. **Medicare** Patients require an **Advance Beneficiary** Notice of Non-Coverage (ABN)

2. **Commercial** payers require **Pre-authorization.** If Pre authorization is denied and testing is still to be performed an Advance Notice of Potential Non-coverage form must be obtained and a copy sent to the laboratory.

The above documents are available on the UVMMC Laboratory Website at http://uvmlabs.testcatalog.org/ under the "Forms" section.

These molecular-based assays are no longer available as part of a thrombosis panel (TP1, TP1C or NONPRG) but are available as separate, orderable tests. In September, 2016, the UVMMC Laboratory added the Activated Protein C Resistance assay (APCR) to the thrombosis panels as a screening test for Factor V Leiden.

Coding tips for Tick bite testing for Lyme Disease:

As we are anticipating a large number of tick bites this summer we wanted to give you a few coding tips.

ICD 10 code W57.XXXA or W57.XXXD can never be used alone.

- If the patient presents with signs or symptoms, you must include those codes.
- In the absence of signs/symptoms, you must code to the body part that was bitten if known.
  PRISM USERS: In the PRISM order "Assoc Encounter Diagnosis" Field -Type in "insect bite" **and** the body part (ex. Insect bit thigh) then select the correct laterality.
  Ex. S70.361 - Insect bite (nonvenomous), *right* thigh
  S70.362- Insect bite (nonvenomous), *left* thigh
  S70.369 - Insect bite (nonvenomous), *unspecified* thigh
- If the body part is unknown- T14.8- Other injury of unspecified body region

THE University of Vermont MEDICAL CENTER
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POSTAGE HERE

PATHOLOGY & LABORATORY MEDICINE COMMUNIQUÉ — JULY 2017

PATHOLOGY & LABORATORY MEDICINE COMMUNIQUÉ

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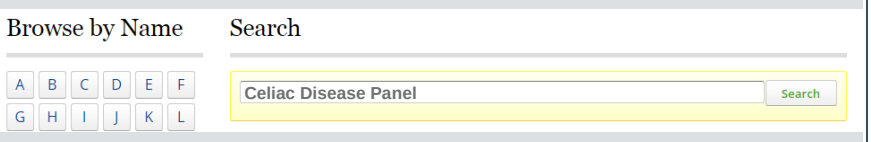
(800) 991-2799

FAX LABORATORY CUSTOMER SERVICE
(802) 847-5905

WEBSITE
UVMLabs.TestCatalog.org/

TEST CATALOG

To view a complete listing of tests available at the University of Vermont Medical Center, please visit UVMHealth.org/MedCenterTests



Syringe Disposal

The University of Vermont Medical Center does not accept sharps for disposal from patients. Chittenden Solid Waste District (CSWD) will accept needles that are packaged according to the instructions outlined in their pamphlet “GET THE POINT: Be safe with syringes and other sharps”. CSWD also has bright orange stickers to attach to a syringe container to warn handlers to be careful. These items are available at any CSWD location. You can also order them so that they are available for patients at your office 872-8111 or visit www.cswd.net