Medical Center, Navicent Health
MEDICAL LABORATORIES COMMUNIQUE'
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CHEMISTRY

New Automated Chemistry Instrumentation:

The Laboratory is introducing a new robotic line and new instruments for most automated chemistry testing effective August 25, 2015. This system offers increased automation and improved data management to improve workflow in the core laboratory.

New Normal Ranges: Implementation of the new Chemistry Instrumentation has resulted in the following "normal" range changes:

	New	Previous	
ALT -	5 – 49 u/L ,	5 – 55 u/L	- Adult
PTH, Intact -	12 – 84 pg/mL,	9 - 77 pg/mL	- Adult

New MCPC Test Listing in PowerChart:

Tests performed by different methods at MCNH and MCPC with potentially significant method specific biases will be reported on different lines in PowerChart to emphasize this difference. These methods are: TpnI, Lipase, BetaHCG and PSA. Quantitative trend analysis across these methods is not recommended. Implementation is expected in September.

New TSH Reflex Panel Composition:

Thyroid Peroxidase (TPO) Antibodies have been added to the evaluation of elevated TSH (suspect hypothyroidism) along with Free T4. TPO antibodies are observed in patients with autoimmune thyroiditis and may cause the destruction of thyroid tissue, resulting in eventual hypothyroidism. This addition was facilitated by the consolidation of this assay on the same instrument as the other lab thyroid function assays.

HEMATOLOGY

Urinalysis Reflex to Culture:

The Laboratory has expanded to include a new orderable "Urinalysis with Reflex to Culture". This orderable is in addition to any urinalysis and urine culture orderables currently available.

When a urine is submitted for urinalysis, if any of the following criteria is met, a urine culture will automatically be performed.

1. UWBC: >=10
2. U nitrate: Positive
3. U Leuko Esterase: Positive
4. U bacteria: Positive
5. Yeast: Present

If none of the criteria is met, no culture will be performed.

CYTOLOGY

HPV Genotype:

HPV 16 18/45 Genotyping Assay is now available for in house testing. It is an *in vitro* nucleic acid amplification test for the qualitative detection of E6/E7 viral messenger RNA (mRNA) of human papillomavirus types 16, and 18/45 in cervical specimens from women with HR HPV positive results. The HPV 16 18/45 genotype assay can differentiate HPV 16 from HPV 18 and/or HPV 45 but does not differentiate between HPV 18 and HPV 45. The test is performed on cervical specimens in ThinPrep Pap Test vials containing PreservCyt Solution and collected with broom-type or cytobrush/spatula collection devices.

Indications for testing:

- Women 21 years and older with atypical squamous cells of undetermined significance (ASC-US) cervical cytology results with a HPV positive result to assess the presence or absence of high-risk HPV genotypes 16, 18, and/or 45.
- Women 30 years and older with positive HPV results used in combination with cervical cytology to assess the presence or absence of high risk HPV genotypes 16, 18, and/or 45.
- This test is not intended for use in determining the need for treatment in the absence of high-grade cervical intraepithelial neoplasia (CIN). Women who are HPV 16/18/45 positive should be monitored carefully for the development of high-grade CIN according to current practice guidelines.
- This is not intended for use as a stand-alone assay; the assay should be performed as a follow-up to an HPV positive result and should be interpreted in conjunction with cervical cytology test results.
- The HPV 16 18/45 is not intended for use in women under age 30 with normal cervical cytology.

To order this reflex test, check the box for reflex to 16, 18/45 genotyping for positive HR HPV on the Cytology requisition; enter "yes" to GY HPV Genotype for online ordering; or call Cytology at 478-633-2108 to have an order sheet faxed to you.

COMPLIANCE CORNER

ICD-10- CM Implementation: On October 1, 2015 the federally mandated ICD-10-CM will go live.

On this date, the medical coding in US health care settings will change from ICD-9-CM diagnosis and procedure code sets to the ICD-10-CM (diagnosis) code

ICD-10 Implementation (Continued from Page 1)

set. Providers in every health care setting and everyone covered by the Health Insurance and Portability and Accountability Act (HIPAA) are required to use ICD-10-CM codes on claims dated October 1, 2015 and beyond. The Medical Center Navicent Health will require all diagnostic information to reflect the new ICD-10-CM code set, effective October 1, 2015.

For additional information regarding this change, the following websites may be helpful:
www.roadto10.org
www.cms.gov/nchs/icd/icd10cm.htm

Test Information Guide – New Tests

Alanine Aminotransferase (ALT)
Alternate name: SGPT, GPT
Specimen: Serum, gel tube, centrifuge within 2 hours
Minimum Volume: 0.5 ml
Stability: 8 hr Room Temp
7 days at 2 – 8° C
2 months frozen
Available: Monday – Sunday 24 hr daily
Turnaround Time: < 3 hr, < 1 hr stat
CPT: 84460
Normal Range: 5 – 49 u/L Adults
5 – 33u/L 0 – 1 yr
8 – 25 u/L 1 – 18 yr
Interpretative guide. ALT is present primarily in liver cells. Although serum levels of AST and ALT become elevated whenever disease processes affect liver cell integrity, ALT is a more liver-specific enzyme.

TSH Reflex:
Specimen: Serum, gel tube, centrifuge within 2 hours
Minimum Volume: 0.6 mL
Stability: 24 hr at room temp.
7 days at 2 – 8° C
6 months – frozen - 20° C
Availability: Monday – Sunday 24 hr daily
Turnaround Time: <3 hr
Normal Range TSH: 0.33 – 4.94 uIU/mL Adult
0.37 – 5.54 uIU/mL 4d – 6 mo.
0.61 – 4.43 uIU/mL 6 mo - < 14 yr
0.33 – 4.94 uIU/mL >= 14 yr
CPT: 84443
Notes: Reflex additional thyroid tests as follows:

1. If TSH is <=0.10 perform Free T4
   CPT: 84439
   If Free T4 from step 1 is:
   Normal – perform Total T3
2. If TSH is 0.11 – 0.32 perform Free T4
   CPT: 84439
3. If TSH is > 4.94 perform Free T4 and Thyroid peroxidase Ab (TPO Ab)
   CPT: 84439 and 86376

PTH Intact:
Specimen: Plasma, green top (heparin) **no gel**
Minimum Volume: 0.6 mL
Stability: 4 hr at room temp.
1 day at 2 – 8° C
6 months – frozen - 20° C
Availability: Monday – Sunday 24 hr daily
Turnaround Time: < 3 hr
Normal Range: 12 – 84 pg/mL - Adult
16 – 63 pg/mL - 0 – 8 yr
22 – 88 pg/mL - 9 – 18 yr

CPT: 83970
Notes: About 90% of the patients with primary hyperparathyroidism have elevated parathyroid hormone (PTH) levels. The remaining patients have normal (inappropriate for the elevated calcium level) PTH levels. About 40% of the patients with primary hyperparathyroidism have serum phosphorus levels <2.5 mg/dL and about 80% have serum phosphorus <3.0 mg/dL.
An (appropriately) low PTH level and high phosphorus level in a hypercalcemic patient suggests that the hypercalcemia is not caused by PTH or PTH-like substances.
An (appropriately) low PTH level with a low phosphorus level in a hypercalcemic patient suggests the diagnosis of paraneoplastic hypercalcemia caused by parathyroid related peptide (PTHRP). PTHRP shares N-terminal homology with PTH and can transactivate the PTH receptor. It can be produced by many different tumor types.
A low or normal PTH in a patient with hypocalcemia suggests hypoparathyroidism, provided the serum magnesium level is normal. Low magnesium levels inhibit PTH release and action and can mimic hypoparathyroidism.