

Lehigh Valley Health Network

## LVHN Scholarly Works

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Patient Care Services / Nursing

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### Conference Learnings

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# CONFERENCE LEARNINGS

15<sup>th</sup> Annual Trauma Symposium: Atlanticare  
Atlantic City, N.J.  
May 20-23, 2013



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# Conference Topics

Multiple Trauma Related Topics were covered including:

- Abdominal Compartment Syndrome
- Updates in Burn Care
- Surgical Emergencies in the Elderly
- Damage Control Resuscitation
- Aquatic Spinal Cord Injuries
- Severe Traumatic Brain Injury
- Advances in Neuro Critical Care Diagnostics

# Learning to Consider for LVHN

## Advances in Neuro Critical Care Diagnostics

- CT Angiography: maps blood vessels using 3-D models. Helpful in diagnosing strokes, aneurysms, and vessel stenosis. Models allows visualization from all sides for aneurysms leading to interventional treatment ie: coiling, as opposed to surgery in some cases.

# Learning to Consider for LVHN

- CT Perfusion Angiography: Evaluates qualitative vs. quantitative blood flow.

Blood volume MAP:

- a. Cerebral blood flow (perfusion)
- b. Cerebral blood volume (infarct)
- c. Mean transit time (perfusion)

# Learning to Consider for LVHN

- MR Spectroscopy: uses energy release as a spectrum of chemicals rather than an image. Use creatinine as the standard chemical. Other chemicals are released are compared to creatinine. If “normal” chemicals are increased or decreased, it can be determined if it is a tumor, necrosis or ischemia.

- **Cerebral Microdialysis:** Uses a small catheter in brain so that dialysate fluid can be instilled, allowed to equilibrate and analyzed. Gives a “real time” view of what is going on. Lactate shows anaerobic metabolism; glutamate shows possible seizure activity; glycerol is a marker of cell breakdown and can indicate necrosis. Glucose decrease can indicate hyperactivity or seizure in the brain; or a decrease in blood flow.

# Group Discussion

# ACTION ITEMS

*Where the rubber meets the road*

