

Air Currents

Neuro Interventional Radiology Services at Miami Valley Hospital

By Angi Gooslin, RN and
Jennifer Schueler, RN



Neurointerventional radiology is a medical specialty dedicated to the treatment of vascular disease involving the central nervous system. It is accomplished by using the latest minimally-invasive technologies. Dr. William Protzer a neurointerventional radiologist is joined by two neurointerventional specialist, Dr. Bryan Ludwig and Dr. John Terry to offer 24 hour a day, seven day a week neurointerventional care at Miami Valley Hospital. Some of the neurological diseases treated by a neurointerventional radiologist include arterial venous malformations, ischemic and hemorrhagic stroke, intracranial aneurysms, intra/extra cranial occlusive disease, arterial dissections, back and spinal neuropathic pain, spinal vertebral compression fractures and sclerotherapy.

The neurointerventional specialists commonly use angioplasty/stenting and coil embolization for the treatment of stroke and aneurysms. Angioplasty and stenting is often done through the artery in the groin. Endovascular therapy is a minimally invasive procedure that also accesses the treatment area from within the blood vessel. In the case of aneurysms, this treatment is called coil embolization, or “coiling”. In contrast to surgery, endovascular coiling does not require open surgery. Instead, physicians use real-time X-ray technology, called fluoroscopic imaging, to visualize the patient’s vascular system and treat the disease from inside the blood vessel.



William Protzer, MD



Bryan Ludwig, MD



John Terry, MD

Doctors Ludwig, Protzer, and Terry, have been instrumental in educating the pre-hospital care personnel and non-stroke center facility staff as to the importance of early recognition of neurological disorders and the treatment options offered at the Miami Valley Hospital Stroke Center. A member of this team of neurointerventional specialists is available and may be contacted 24 hours a day via the Access and Transfer Center at Miami Valley Hospital at 1-866-330-3444. Pre-Hospital personnel may relay verbal report to the Miami Valley Hospital medical control physician within the Emergency Trauma Center. If indicated, a stroke alert will be generated to notify the neurointerventional team of the patient’s symptoms, time of arrival and need for evaluation. Patients requiring neurointerventional procedures will undergo their treatment in the newly designed, state-of-the-art neurointerventional suites at Miami Valley Hospital’s certified primary stroke care facility.



Tim is pictured fourth from the left, Dale is fifth from left and kneeling is Rob.

Call of Duty

By Jennifer Schueler, RN

CareFlight Air and Mobile proudly salutes three of their pilots for their recent service in Iraq. Dale Smith, Rob Nickel, and Tim McClain all served with the Army Air National Guard flying the UH60 Blackhawk aircraft.

Collectively these pilots have been active in the military well over 20 years and have logged hundreds of flight and night vision goggle hours. Prior to their deployment to Iraq, these pilots were sent for readiness training in Fort Sill, Oklahoma and then to the desert of Kuwait. Their assignment in Iraq placed them at the same base in the city of Balad. This gave them the opportunity to fly together on multiple missions. These pilots all rotated shifts, which started as early as 0430 hours, lasting until 1800 hours or the evening/night shift which began at 1300 hours and lasted to 0200 hours. Typically a flight duty day shift ranged between five to seven hours and evening/night flight duty shifts ranged between four to six hours. Their flights would take them all over Central Iraq, with much of the time spent flying within the huge sprawling city of Baghdad. They were responsible for flying dignitaries, some VIPs, soldiers and contractors. Most pilots were also considered "Air Mission Commanders" which gave them the responsibility to act as the lead pilot on flight missions. During some of these missions crews would fly the American flag in the cockpit. Rob purchased a total of 18 American flags from the Balad PX and upon his return, presented CareFlight Air and Mobile with a flag flown on a mission that involved not only Rob, but also Dale and Tim. CareFlight Air and Mobile was humbled to receive this special flag and proudly displays it on the seventh floor of Miami Valley Hospital.

As you might imagine, the Blackhawk is not air conditioned and in the desert temperatures the inside of the cockpit reached well above 52 degrees Celsius or 125.6 degrees Fahrenheit. Flight gloves were a must to wear as touching the cockpit controls at that temperature guaranteed at least a second degree burn to the finger tip or exposed skin. Each pilot's



flight suit was equipped with survival gear, a military issued weapon and ammunition, and underneath that apparel, pilots would wear body armor and a micro cooling unit that fit around their chest and abdomen. All that extra gear weighed approximately 100 additional pounds! The micro cooling unit is a coil type system filled with anti-freeze that circulates around the chest and abdomen in an effort to keep the body cool. The pilots also carried bottled drinking water to help keep them cool and hydrated during their flight missions.

The biggest obstacle these pilots encountered was weather related issues such as strong winds and dust storms. Often, they were hampered by the inability to check current weather conditions because of their location or unavailable radar equipment.

Living conditions in Iraq consisted of a two bedroom trailer accommodating two soldiers and separate trailers equipped with showers and bathrooms. Meals were served in the dining facility and these pilots described the food as better than expected. Fresh fruit and vegetables were always available and the Mongolian BBQ on Saturday night seemed to be quit a popular smorgasbord.

Like all jobs, there is down time and some of the activities available for these pilots were swimming in a pool on the military base, playing computer and video games, watching movies, playing cards, reading and exercising. All of these pilots especially enjoyed receiving packages from home. Some of their favorite items received were specialty coffees, homemade cookies and treats and a few good books.



We are quite proud of Rob, Dale, and Tim and were especially grateful and excited when they returned home and resumed their positions as pilots for CareFlight Air and Mobile Services. Welcome home and thank you for your dedication and service.

Outreach Update

“Drip and Ship”

By Andrew C. Hawk, MD, Medical Director, CareFlight



Andy Hawk, MD

“Drip and Ship” – an interesting moniker in today’s world of acute ischemic stroke care. In this realm, it refers to starting tPA at the outlying hospital prior to transferring the ischemic stroke patient to a stroke center such as MVH. For the appropriate stroke patient, the earlier this “clot buster” is started, the better.

Time efficient administration of tPA doesn’t only correlate with saving brain tissue. It also correlates with lowering the risk of a potential significant adverse effect: brain hemorrhage.

Previously the window for potential tPA administration was less than 3 hours from symptom onset; studies now point to extending this out, on a case-by-case basis, to at least 4 1/2 hours. That still isn’t a great deal of time, especially if the patient historically required transfer prior to starting tPA. Studies have shown that, with appropriate attention to detail, a transfer system for CVA patients that includes “Drip and Ship” with tPA can be effective and risk appropriate.

Therefore, the MVH Stroke Center has developed ischemic stroke guidelines that are being shared with our referral hospitals. “Drip and Ship” with tPA is one important feature of this strategy for early stroke treatment. And this leads to the overall goal: to initiate comprehensive care and intervention to the ischemic stroke patient as early as clinically possible.

“On the Road”

60 people were on hand for “On the Road to Butler and Warren County” educational program on April 17, 2010 which was held at Atrium Medical Center in Middletown. Educational sessions included EMS Management of the Burn Injured Patient, Pediatric Trauma, “Unattended Deaths – Not Always What They Seem”, presented by the Montgomery Co. Coroner’s office, a trauma and

medical case study review of selected patients transported by CareFlight from the Butler and Warren County areas within the past year, and “Emerging Trends in Stroke Management”.

Miami Valley Hospital’s new human patient simulator with the Mobile Education Lab (MEL) were also on display during the lunch break.

CareFlight Calendar Wins Award

The Aster Award is a medical marketing awards program which allows healthcare organizations and advertising agencies to compete against similarly-sized competitors from across the nation and world.



Each year an annual contest is held, accepting entries which have been designed, printed and/or distributed the previous year. These are then judged, scored and recognized for their excellence in healthcare marketing and advertising.

Submitted by the Marketing Department at Miami Valley

Hospital, the 2010 CareFlight calendar received a Silver award for its uniqueness in design, which featured selected personal accounts and current pictures of patients who had been flown or transported by the MICU throughout CareFlight’s 27 year history.

Fire and EMS Chief’s Dinner – 2010

CareFlight’s annual Fire and EMS Chief’s dinner will be held on Wednesday evening, October 6, 2010.

(continued on next page)

The Region's Leader

Outreach Update (continued)

Drive Smart Programs

The Drive Smart programs for 2010 began on March 29 and were conducted through the middle of May for 36 high schools within CareFlight's service area.

Coordinated by CareFlight Air and Mobile Services and Miami Valley Hospital's Trauma Program, these programs are conducted yearly during prom season to help increase student awareness of the potential serious consequences of driving irresponsibly, and to outline the risks, resources and ramifications involved when drivers make poor decisions which

may involve speeding, texting, alcohol or drug use while operating a motor vehicle.

Area fire, EMS and police agencies, as well as the Ohio State Highway Patrol volunteer their time and effort to present a realistic portrayal of a serious motor vehicle crash, its physical impact and emotional turmoil on the victim(s), as well as the potential civil consequences involved in the aftermath.

New Employees



Stephanie Fitchpatrick, RN



Josh Ingham, RN



Mike Moyer, RN



John Myers, EMT-P



Elizabeth Obermeyer, RN



Lauri Puca, RN



Angela Wenger, RN



Lindsey Wiley, EMT-P



Amanda Wolfe, RN

*Miami Valley Hospital
One Wyoming Street
Dayton, Ohio 45409
CareFlight Air and
Mobile Services
(800) 251-2273*

Mary Boosalis
President and Chief
Executive Officer

Candy Skidmore, RN
CareFlight Program
Director

Beth Newman-Hill, RN
CareFlight Program
Manager

Jennifer Schueler, RN
Editor

Angi Gooslin, RN
Andrew C. Hawk, MD
Jennifer Schueler, RN
Contributing Writers

Cindy Ratermann
Photography

Kelly Spittler
Graphic Design

**Miami Valley Hospital
Mission**

*We will build healthier
communities with
others who share
our commitment to
provide high-quality,
cost-effective health care
services.*

Operated By **Air Methods**

camts
Commission on Accreditation of Medical Transport Systems