UAMS Hosts Australian Neurosurgeon for Demonstration of Innovative Robotic Spine Surgery

UAMS Serves as Teaching and Observation Site for Robotic Spine Surgery

LITTLE ROCK — The University of Arkansas for Medical Sciences (UAMS) welcomed Professor Greg Malham, BSc, MB ChB, director of spine surgery at Epworth Hospital in Melbourne, Australia, as the first visiting international surgeon to observe a procedure that uses an innovative technique for minimally invasive spine surgery.

Malham, who also serves as a professor of surgery at the prestigious University of Melbourne and professor of spine surgery research at Swinburne University, is recognized as one of Australia’s premier spinal surgeons. Epworth Hospital is the country’s largest private spine surgery institute, employing more than 40 spine surgeons and handling more than 5,000 spine cases each year.

During his Oct. 19 visit to UAMS, Malham observed a prone lateral lumbar fusion, which was performed using the ExcelsiusGPS robotic navigation platform. UAMS is a spinal robotics teaching and observation site for this technology, and the campus has hosted surgeons from across the United States.

Noojan Kazemi, M.D., a spine surgeon and associate professor in the UAMS College of Medicine’s Department of Neurosurgery, said UAMS was one of the first medical facilities to use robotic technology for prone lateral surgery, as the procedure traditionally is performed with the person positioned on his or her side.

To do this, UAMS partnered with Globus Medical Inc., a Pennsylvania-based medical device company, to develop a special positioner and a method of using computer-assisted navigation to conduct the procedure on a prone patient.

“It’s definitely a major advancement in minimally invasive spine surgery,” Kazemi said.
The robotic navigation technology serves as a guide that helps ensure the surgeon is working at the correct site, similar to a GPS system. Using this technology also minimizes the need for X-rays. This greatly reduces exposure to radiation for the patient and the medical staff, Kazemi said.

“We at UAMS were the very first to apply the technology of the robotic navigation platform and patient positioner to this new surgical technique,” he said. “With minimally invasive techniques, we are able to minimize blood loss in the operating room, shorten our patients’ stays in the hospital, and get them back to their daily lives much faster.”

Kazemi said this surgical advancement shows UAMS’ commitment to offering Arkansans the latest technology and techniques for spine procedures. “And as a result, we have surgeons from around the country and the world coming here to learn,” he said.

Malham said the methods he observed during his visit will have applications for his work back home.

“Not having to alter a person’s position during surgery is very efficient and very good for the patient,” Malham said. “It was wonderful seeing Dr. Kazemi show his expertise and his technique.”

Kazemi said UAMS can also benefit from hosting an expert like Malham. “Collaborating with spine surgery leaders is a big advantage for us and will hopefully contribute to the field,” he said. “Having Professor Malham here pushes us to do better as well.”

UAMS is the state’s only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; a hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS’ clinical enterprise. UAMS is the only adult Level 1 trauma center in the state. UAMS has 3,240 students, 913 medical residents and fellows, and five dental residents. It is the state’s largest public employer with more than 11,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children’s, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on Facebook, Twitter, YouTube or Instagram.

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