Posterior approach to kidney dissection: An old surgical approach for integrated medical curricula

Integrated medical curricular changes are altering the historical regional anatomy approach to abdominal dissection. The renal system is linked physiologically and biochemically to the cardiovascular and respiratory systems; yet, anatomists often approach the urinary system as part of the abdomen and pelvic regions. As part of an integrated curriculum, the renal system must be covered relatively quickly after the thorax in the cadaver laboratory, often without the opportunity to fully appreciate the rest of the abdominal contents. This article provides dissection instructions that follow one of the historical surgical approaches for nephrectomy, including preservation of the posterior abdominal wall neurovasculature. Dissection procedures were developed for first-year medical students, intending this posterior approach to the kidneys to be their first introduction to the renal system. It has been successfully implemented with the first-year medical students at the University Of New England College Of Osteopathic Medicine. Utilizing this posterior approach to the kidney, enabled the study of the anatomy of the kidneys, suprarenal glands, and renal vessels, as well as the muscles of the lumbar spine, while maintaining the integrity of the anterior abdominal wall and peritoneal cavity for future gastrointestinal and reproductive system-based dissections.

Biography
Frank J Daly is an Associate Professor in the Department of Biomedical Sciences at the University Of New England College Of Osteopathic Medicine. He has received his Doctorate in Anatomy & Neurobiology in 1997 from Boston University School of Medicine and pursued his Post-doctoral studies from the Howard Hughes Medical Institute at Massachusetts General Hospital and Harvard University. He currently teaches Gross Anatomy & Embryology in the Osteopathic Medical Clinical Skills course and is the Course Director for Gross Anatomy, Histology and Embryology for the dental students. He is the Director of the Anatomical Donor Program for the University of Maine.

Notes: