

A Prolific Year for CORTICES Researchers

Floating elbows, musculoskeletal infections and other traumatic orthopaedic conditions are rare in children and not always well understood.

Six years ago, a group of pediatric orthopaedic surgeons from around North America established a research collaboration to advance care for these conditions. Since then, CORTICES (Children's ORthopedic Trauma and Infection Consortium for Evidence-based Studies) has grown to include 19 pediatric trauma centers and more than 30 investigators, most of whom are in the early stages of their research career. They include two pediatric orthopaedic surgeons at Cincinnati Children's, Jaime Rice Denning, MD, MS, and Wendy Ramalingam, MD.

Last year was a prolific one for CORTICES. The group published three peer-reviewed articles, did three podium presentations at POSNA 2020, and presented two e-posters — one at POSNA 2020 and the other at the European Pediatric Orthopaedic Society (EPOS) meeting in 2020.

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— Jaime Rice Denning, MD, MS

Denning was an investigator on one of the published studies, which analyzed data related to orthopaedic consults for musculoskeletal infections (MSKI) at 18 pediatric trauma centers. Of the 25,000 million pediatric emergency department visits studied, 550,000 led to orthopaedic consults. Of those, 45,000 (or 8.3%) became an MSKI consult and led to a culture. But only 34% of those cultures were positive.

“We wanted to define the incidence of consults where orthopaedic specialists are asked to rule in or rule out an MSKI in the emergency department or inpatient setting,” Denning says. “There is a wide variation from hospital to hospital as to the percentage of orthopaedic consults that are for MSKI and the percentage of MSKI consults that resulted in a positive culture. These variations suggest there

are opportunities to educate referring physicians about MSKI to perhaps standardize practices surrounding pediatric MSKI consultation. We are still using the study to gather more details about specifics related to pediatric MSKIs.”

CORTICES' current research includes studies for pediatric pelvic/acetabular trauma, non-accidental trauma and distal tibia physeal fractures.

“Researchers within CORTICES are a motivated, visionary group of people who inspire one another to accomplish work we wouldn't have the resources to do alone,” Denning says. “We achieved a great deal in 2021, even in the midst of the pandemic, and we're excited to keep the momentum going with in-person meetings and more opportunities to collaborate in the year ahead.”

