INTERDISCIPLINARY TEAM ADVANCES CARE IN ORTHOPEDIC ONCOLOGY AT MOUNT SINAI

Achieving better coordination of interdisciplinary care is a critical topic in health care debates in America. Orthopedic surgery represents a model of integration for multi-specialty care, especially when it comes to sarcomas and other orthopedic malignancies.

These can be heartbreaking conditions, afflicting young children and older adults alike, causing great stress and suffering to entire families. Fortunately, multidisciplinary approaches that are rapidly emerging at The Mount Sinai Medical Center and other top institutions are helping to unravel the complexities of these afflictions, challenging them with broader insights, more precise diagnoses, and more effective treatments specific to each case.

At Mount Sinai’s Leni and Peter W. May Department of Orthopedic Surgery, for example, world-class surgeons and oncologists work together to bring the highest level of expert and coordinated care to those with musculoskeletal neoplasms. James Wittig, M.D., Associate Professor of Orthopedic Surgery and Chief of Orthopedic Oncology, leads a nationally renowned interdisciplinary team that cares for these complex and challenging cases.

Dr. Wittig and Ilya Iofin, M.D., Assistant Professor of Orthopedic Surgery, perform hundreds of complex surgical cases every year. Each case is a marvel of medicine and skill, involving advanced preoperative imaging, meticulous tumor resection, and function-preserving reconstruction through limb-salvage procedures. The surgical teams employ techniques that span several specialties and subspecialties, from microsurgery, plastics, and vascular surgery to orthopedic joint reconstruction. These multifaceted procedures regularly save arms and legs while removing large tumors that might have resulted in amputation in the past.

The recent appointment of Robert Maki, M.D., as Chief of Pediatric Hematology and Oncology and as Medical Director of the Sarcoma Cancer Program, underscores Mount Sinai’s commitment to expanding our role as leaders in world-class, comprehensive specialty care for adult and pediatric patients with sarcoma. A distinguished sarcoma cancer researcher, Dr. Maki has made many significant contributions to the understanding and targeting of soft-tissue and bone sarcomas. His expertise in novel therapies for treatment has led him to investigate new drugs to attack molecular targets.

Working closely with Dr. Wittig, Dr. Maki’s talents greatly expand Mount Sinai’s ability to provide world-class comprehensive specialty care—from the most advanced limb-sparing surgery to the newest and most novel medical treatments and translational clinical trials—to all patients with sarcoma.

Consider, for example, the recent case of a 50-year-old woman who presented with a large ossified exophytic mass in her left thigh. She came to Mount Sinai with a diagnosis of a low-grade parosteal osteosarcoma. Dr. Wittig performed a resection of the proximal femur and reconstructed it with a modular segmental tumor prosthesis. He then executed complex muscle rotational flaps to stabilize the hip and augment hip abductor function. Roberto Garcia, M.D., Assistant Professor of Pathology and a renowned musculoskeletal pathologist, found areas in the specimen of high-grade malignant differentiation. Based on this, Dr. Maki recommended a specific chemotherapy protocol.

Our multidisciplinary approach to complex cases relies on teams such as this—highly skilled surgeons and specialists focused on subspecialty procedures. Working together, these experts are able to establish best practices and provide each of our patients with the most comprehensive, advanced, and effective care available.

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