

Alberta Children's Hospital

Section of Anesthesia

In Calgary, all tertiary and most secondary and primary medical and surgical services for children are provided at the Alberta Children's Hospital. Approximately 10,000 anesthetics per year are administered by the 17 full and part-time members of the Section of Pediatric Anesthesia with support from 9 anesthesia respiratory therapists. We achieved accreditation in 2004 as a tertiary pediatric trauma centre and are the provincial centre for pediatric bone marrow transplants. In addition to routine cases, we provide anesthesia for complex pediatric cases and have expertise in chest wall deformity/scoliosis surgery, thoracoscopic/laparoscopic surgery, airway surgery and seizure surgery.

A new facility was opened in September 2006 to accommodate the huge population influx of young families to Alberta, and it remains a challenge to meet the demands for our services. The operating rooms are equipped with state of the art equipment, and we exclusively use an automated anesthetic record keeping software system, part of the electronic medical record. Other services provided out of OR include: anesthesia services for diagnostic and interventional imaging procedures such as MR/CT imaging, angiography procedures, radiation oncology services at the Tom Baker Cancer Centre, pediatric cardiac catheterization studies and pediatric anesthesia services for dental restorations and cataract extractions.

Our fully funded Pediatric Pain Management team provides a complete range of diagnostic and therapeutic interventions in acute and chronic pain services. This service also provides sedation anesthesia services in pediatric oncology for painful procedures, burn dressing changes and neonatal anesthesia for PDA ligations at the Foothills Medical Centre Neonatal Unit. Postoperative pain services are provided with the assistance of two advanced practice nurses, a Nursing Practitioner and a Certified Nurse Specialist. In 2006, we cared for 500 patients of which 150 patients had a continuous regional anesthetic technique.

Our members hold University of Calgary clinical appointments with the Faculty of Medicine and two members have major appointments. As the main resource for pediatric anesthesia, we provide comprehensive education and training for medical students and residents. Off service, paramedic, respiratory therapy and nursing students are also taught pediatric skills. A Clinical/Research Fellowship Program has been in place since 1990 and is designed to provide the physician anesthesiologist with the necessary skills and attributes to sub-specialize in pediatric anesthesia. Section members have assisted the fellows with conducting clinical research investigations. Graduates of this program now provide pediatric care throughout the world.

International education and service has been a priority of members of the Section. Organizations we have volunteered with include the International Education Fund of the Canadian Anesthesiologists Society, Interplast, Project Outreach, Operation Smile, Rotaplast International, the Evangelical Medical Aid Society and the International Red Cross. Our close association with our twinned hospital, the Ibaraki Children's Hospital in Mito, Japan has facilitated international exchange of information with the Far East. Through these international associations, we have been able to improve the anesthetic care of children both locally and internationally.