

Quality of life in adult survivors greater than 10 years after pediatric heart transplantation

Petroski RA, Grady KL, Rodgers S, Backer CL, Kulikowska A, Canter C, Pahl E
Journal of Heart & Lung Transplantation Jul 2009;28(7):661-666.

BACKGROUND: This study assessed quality of life (QOL) in adult survivors of pediatric heart transplantation who survived > or = 10 years after transplantation. **METHODS:** Prospective data were collected from heart transplant recipients who were aged > or = 18 years and had survived > or = 10 years after transplantation (transplantation between July 3, 1986, and April 4, 1997). QOL data were collected from patients using the Medical Outcomes Study 36-Item Short Form (SF-36) Health Survey. Clinical data were collected from medical records. Statistical analyses included frequencies and measures of central tendency. **RESULTS:** Twenty-three patients (65% men, 91% white) completed the study. At the study initiation, they were a mean age of 9.0 +/- 7.1 years at transplantation, and were a mean age of 25.2 +/- 5.5 years (range, 18-34 years) and a mean of 16.2 +/- 3.0 years (range, 11-22 years) post-transplantation. Most were in school or working. Mean patient QOL scores from the SF-36v2 survey were 50.56 +/- 0.5 (range, 27.3-68.9) for physical health and 49.88 +/- 11.72 (range, 23.56-62.84) for mental health, similar to the general United States population. Late complications were frequent, including transplant coronary artery disease, 3; repeat heart transplantation, 2; post-transplantation lymphoproliferative disorder, 6; kidney transplantation, 5; acute late rejection, 5; and arrhythmias, 4. **CONCLUSION:** This report of QOL in adult survivors of pediatric heart transplantation shows patient perception of physical and mental health is similar to the general population despite serious late complications. A multicenter study is planned to further evaluate QOL in this unique cohort.

Congenital melanocytic nevi of the eyelids and periorbital region

Margulis A, Adler N, Bauer BS
Plastic & Reconstructive Surgery Oct 2009;124(4):1273-1283.

BACKGROUND: Congenital melanocytic nevi of the eyelids and periorbital region are unusual. Although their malignant potential can be debated, they present a significant aesthetic concern and also disturb lid function. In this article, the authors present an expanded approach to evaluation and treatment of these patients. **METHODS:** Forty-four consecutive patients, aged 6 months to 18 years, were treated from 1980 to 2008. All patients had congenital nevi involving one or both eyelids,

with or without extension into the surrounding periorbital area and face. Follow-up ranged from 6 months to 20 years. **RESULTS:** All patients were treated successfully with excision and reconstruction of their congenital eyelid and/or periorbital nevi. The involved ciliary border was preserved in all but one case, where the exophytic lesion presented function concerns. Complications included asymptomatic lateral ectropion in three patients. Asymmetry of the palpebral apertures, before treatment, was present in at least half of the patients with extensive facial nevi, and the abnormalities causing these differences may impact efforts to obtain final lid symmetry. A single patient died as a result of extensive metastatic melanoma from an extracutaneous site. **CONCLUSIONS:** Early evaluation and treatment of these nevi may help in preventing the aesthetic, functional, and health-related issues for the patients. Although the current group of infants and young children will not reach full facial growth for more than another decade and a half, and therefore await critical assessment of their long-term outcomes, the authors hope that the experience gained to date will assist surgeons in managing these complex reconstructions.

Parent-assisted or nurse-assisted epidural analgesia: is this feasible in pediatric patients?

Birmingham PK, Suresh S, Ambrosy A, Porfyrus S
Paediatric Anaesthesia Nov 2009;19(11):1084-1089.

AIM: The aim of this study was to assess the feasibility of parent-assisted or nurse-assisted epidural analgesia (PNEA) for control of postoperative pain in a pediatric surgical population. **METHODS:** After the institutional review board (IRB) approval was obtained, an analysis of our pain treatment services database of pediatric surgical patients with epidural catheters in whom the parent and/or nurse were empowered to activate the epidural demand-dose button was evaluated. **RESULTS:** Over a 10-year period between 1999 and 2008, 128 procedures in 126 patients were provided parent or nurse assistance of the epidural demand dose. Satisfactory analgesia was obtained in 86% of patients with no or minor adjustments in PNEA parameters. Fourteen percent of patients were converted to intravenous patient-controlled analgesia (PCA) for inadequate analgesia (7%) or side effects (7%). None of the patients in this cohort required treatment for respiratory depression or excessive sedation. **CONCLUSIONS:** Parent-assisted or nurse-assisted epidural analgesia can be safely administered to children undergoing surgery who are physically or cognitively unable or unwilling to self-activate a demand dose. Additional studies are needed to compare the efficacy of PNEA with other modalities for postoperative pain control in children.

Fetal pyelectasis as predictor of decreased differential renal function

Kim DY, Mickelson JJ, Helfand BT, Maizels M, Kaplan WE, Yerkes EB

Journal of Urology Oct 2009;182(4 Suppl):1849-1853.

PURPOSE: A decreased percent of differential function is a common indication for infant pyeloplasty but there is no recognized fetal ultrasound parameter to predict this deficit. We determined whether there is a correlation between fetal pyelectasis and the newborn percent differential function that may enhance prenatal counseling and guide postnatal evaluation. **MATERIALS AND METHODS:** Our database was queried for fetal and newborn measures with fetal pyelectasis on ultrasound and the percent of differential function on renal scintigraphy. Fetal pyelectasis data were stratified by estimated gestational age and the percent of differential function. The affected cohort was defined as having 35% or less differential function and the unaffected cohort was defined as having greater than 35%. The Wilcoxon 2-sample test was used for statistical analysis with logistic regression to generate estimated probability models of a decreased percent of differential function vs mm fetal pyelectasis. **RESULTS:** A total of 831 cases had fetal and newborn ultrasound data available with a total of 229 renal scans identified. Of the 229 cases 36 (16%) had 35% or less differential function on scintigraphy. At estimated gestational age 33 weeks or less the affected cohort had 8 mm greater pyelectasis than the unaffected cohort (OR 1.2, $p < 0.0001$). At estimated gestational age greater than 33 weeks the affected cohort had 4 mm greater pyelectasis than the unaffected cohort (OR 1.07, $p < 0.07$). Subgroup analysis before 33 weeks of estimated gestational age showed similar significance (OR > 1 , $p < 0.001$). **CONCLUSIONS:** Approximately 16% of all fetuses with pyelectasis have 35% or less differential function as newborns, including 36% identified by pyelectasis greater than 10 mm at estimated gestational age 20 to 24 weeks. Fetal pyelectasis greater than 10 mm at estimated gestational age 20 to 24 weeks and greater than 16 mm at greater than 33 weeks is associated with 35% or less differential function in the newborn.

Laparoscopic fundoplication after previous open abdominal operations in infants and children

Barnes KA, St Peter SD, Holcomb GW 3rd, Ostlie DJ, Kane TD
Journal of Laparoendoscopic & Advanced Surgical Techniques. Part A. Apr 2009;19(Suppl 1):S47-S49.

BACKGROUND: There have been multiple reports in the adult literature stating that previous open operations should no longer be considered a contraindication to the laparoscopic approach. However, there are little data on this topic in the pediatric population, particularly in patients with neonatal abdominal pathology unique to the newborn population. Therefore, we reviewed our experience with laparoscopic fundoplication after a variety of previous abdominal conditions and operations in the pediatric population. **METHODS:** An institutional review board-approved retrospective chart review was performed on all patients undergoing laparoscopic fundoplication after a previous open operation between October 2000 and December 2007. The data collected demographics, comorbid conditions, previous abdominal operations, gastrostomy tube placement, time interval between the initial operation and laparoscopic fundoplication, conversions, and complications. **RESULTS:** Forty-five patients underwent a laparoscopic Nissen fundoplication after an open operation during the study interval. Mean age was 41.3 months (range, 1-233) with a mean weight of 14.3 kg (range, 2.9-63.6), and 31 were (78.9%) male. A total of 61 previous abdominal operations were performed (range, 1-4). Mean time between last open operation and laparoscopic fundoplication was 27.3 months (range, 0.5-147). Mean operative time was 161 minutes (range, 73-420). There were no conversions and 3 perioperative complications occurred (splenic hematoma, clogged gastrostomy tube, and liver bleed). Early reoperations were performed in 2 patients (4.4%): 1 for bleeding on day 2 and the other for leaking gastrostomy day 12. **CONCLUSION:** Our data demonstrate that laparoscopic fundoplication after a previous open operation is feasible and safe.