Parental projection of QOL. Perspectives from a cohort of parents of neonates at risk of severe neurodevelopmental outcome as defined by follow-up referral criteria (≥29 weeks, Sarnat 2, IVH 3, PVL, severe neurological condition, severe genetic abnormality, exchange transfusion, ROP 3, diaphragmatic hernia or any condition having significant neurological impact) were compared with a control group including parents of all other neonates admitted to the NICU. Questions include likert scales (1 to 7) and yes/no answers. Variables were analyzed using Chi² test.

RESULTS: 107 questionnaires were returned (88%). 58 (54%) cohort group and 49 (45%) control. Both groups had similar income and level of education. Parents of cohort group projected more long term financial impact on the family (p=0.012). There were no statistical differences between the groups on projections of: physical and mental difficulties, pain and discomfort, longevity of life, having a chronic condition, feeling of difference and ability to cope, happiness and QOL, role in society, having friends and a family, ability to live alone and emotional impact on the family. Both group had low concern associated perspective of risk of long term physical and mental difficulties, pain or child feeling different (mean score 1.7-2 out of 7), and rated high on child happiness, QOL and ability to cope (mean score 6.4-6.6 out of 7). Both cohort and control groups envisioned sequelae with moderate rating on emotional impact on the family (mean score 2.4-3.2 out of 7). 100% of parents projected that their child would be sufficient for activities of daily living and able to find employment.

CONCLUSION: Parental projection of future QOL of infants hospitalized in NICU is not associated with known risks of neurodevelopmental sequelae. Most parents predict overall a good future quality of life for their child. Parental concerns focused more on the impact on the family.

65 POST OPERATIVE NON-INVASIVE VENTILATION AND COMPLICATIONS IN OESOPHAGEAL ATRESIA-TRACHEOESOPHAGEAL FISTULA
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BACKGROUND: Advancements in critical care have been instrumental in the observed improvement in survival and complication rates in Oesophageal atresia/Tracheo-Esophageal Fistula (OA-TOF). Nearly all neonates with OA-TOF undergo assisted ventilation at some point in the course of their post-operative care. Post-operative assisted ventilation strategies are heterogeneous from one center to another and to date limited data are available to guide current practices of assisted ventilation in cases of OA-TOF.

OBJECTIVES: The present study aims to examine the impact of post operative assisted ventilation strategies on clinically relevant outcomes in a retrospective series of OA-TOF patients.

DESIGN/METHODS: A single center retrospective chart review was conducted including all neonates born with OA-TOF 1986-2016 for whom complete ventilatory data were available. Exclusion criteria: death prior to surgical repair, presence of pulmonary disease, cardiac malformation resulting in severe pulmonary hypertension. Primary data points evaluated were: Post-operative ventilation strategy, Survival, Anastomotic Leakage, Stricture, Pneumothorax and Mediastinitis. Statistical significance was determined using Chi-square test for p less than 0.05.

RESULTS: 70 patient charts were reviewed. Assisted ventilation was used in 69 infants.1 infant was extubated from the operating room. Of the cohort infants, 69 (98.5%) infants required conventional ventilation postoperatively and 19 (27.1%) were bridged with postextubation non-invasive ventilation (Continuous Positive Airway Pressure (CPAP), Non-invasive Positive Pressure Ventilation (NIPPV) or High-Flow Nasal Cannula (HFNC)). Survival was 68 (97%), incidence of stricture was 25 (35.7%), anastomotic leak 14 (20%), pneumothorax 9 (12.9%) and mediastinitis 4 (5.7%). 11 (15%) infants were on CPAP postoperatively. CPAP was statistically associated to stricture and death.
2 (2.9%) infants were on NIPPV post-operatively. NIPPV statistically associated to death. 6 (8.5%) infants were on HFNC post-operatively. HFNC was statistically associated to anastomatic leak. 10 (14.3%) infants had long gap OA-TOF. Long gap was statistically associated to leak, stricture, mediastinitis, pneumothorax and pneumonia. 8 (11.4) infants were reintubated. Reintubation was statistically associated to pneumothorax, mediastinitis and death.

CONCLUSION: The most important finding of the present study is that CPAP assisted ventilation is associated with a significantly higher rate of oesophageal stricture and HFNC assisted ventilation is associated with a significantly higher rate of anastomotic leakage following repair of OA-TOF. We hope to use these findings to develop guidelines for ventilation strategies in the care of babies born with OA-TOF.

66 USE OF SIMULATION IN CANADIAN NEONATAL-PERINATAL MEDICINE TRAINING PROGRAMS
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BACKGROUND: Simulation is being increasingly used in medical education. It is effective in improving knowledge and in many fields has been associated with improved performance. Simulation is being considered not only for delivery of education but also for assessment. Before such a tool is used routinely in neonatal-perinatal medicine training across Canada, it is important to understand its current usage by accredited training programs.

OBJECTIVES: Our aim was to characterize the type of simulation modalities used and the perceived simulation-based training needs in Canadian neonatal-perinatal medicine training programs.

DESIGN/METHODS: A 22-item and 13-item online descriptive survey was sent to all neonatal-perinatal medicine program directors and current neonatal-perinatal medicine fellows in Canada, respectively. The survey was modeled on a previously validated tool by Johnson et al. Responses were collected over a 30 day period.

RESULTS: In total, 8 (63%) program directors and 24 (28%) fellows completed the survey, with all respondents indicating that simulation is currently being used. Both lab-based and in-situ simulations are occurring, with a range of different simulators employed to primarily teach resuscitation, procedural, and communication skills. Fellows indicated that simulation could be used to teach other important topics as well, including disease-specific management, crisis resource management, prevention of medical error, and patient safety. In addition, 5 (63%) of programs have faculty with formal simulation training, with 4 (50%) of programs having only one faculty involved in simulation research.

CONCLUSION: Simulation is widely used in neonatal-perinatal medicine training in Canada, with both teachers and learners identifying this as an important tool. Simulation can be used to teach a range of skills, but programs will need to align their curriculum with both training objectives and learner needs. There is an opportunity for faculty development and increased simulation research.

67 EFFECTS OF BOVINE LIPID EXTRACT SURFACTANT (BLES) ADMINISTRATION IN PRETERM INFANTS TREATED FOR RESPIRATORY DISTRESS SYNDROME
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BACKGROUND: Surfactant therapy is effective in improving the clinical outcomes of premature infants with respiratory distress syndrome (RDS). Bovine Lipid Extract Surfactant (BLES®) is commonly used to treat RDS in premature infants in Neonatal Intensive Care Units (NICU) across Canada.

OBJECTIVES: To describe the length of time to wean to room air following the administration of BLES for the treatment of RDS in premature infants as per local evidence-based practice guideline.