**CONGENITAL DIAPHRAGMATIC HERNIA FORM**

**(To be used for patients born on or after 1/1/2007)**

Year of Birth: Center #:  Patient #:

Date of Birth:  Time of Birth:

 [ ]  Inborn

[ ]  Outborn: Admission Date:  Time:

Sex: [ ]  M [ ]  F

Race: [ ]  Asian [ ]  Black [ ]  Hispanic [ ]  Native American [ ]  White
 [ ]  Other:

Birthweight:  kg EGA (at birth):  weeks

APGARs (1/5/10): //

CPR in Delivery Room: [ ]  Yes [ ]  No

Method of Delivery: [ ]  Vaginal (Spontaneous) [ ]  Vaginal (Induced)

 [ ]  C-section (Elective) [ ]  C-section (Urgent/Non-elective)

If C-Section, reason:

 If urgent/non-elective C-Section, what was intended method of delivery:

 [ ]  Vaginal (Spontaneous) [ ]  Vaginal (Induced) [ ]  C-section (Elective)

Prenatal diagnosis of CDH: [ ]  Yes [ ]  No

 If Yes, diagnosis made at  weeks gestation

Prenatal steroids given: [ ]  Yes [ ]  No [ ]  Unknown

If Yes, steroids given at gestational ages (in wks): ///

Associated Non-Cardiac Anomalies (Check all that apply and please provide DX if known):

[ ]  Chromosomal – If Yes, please describe:

[ ]  Other Anomalies – If Yes, please describe:

**Associated Structural Cardiac Anomalies (Check all that apply):**

[ ]  ASD

[ ]  VSD

[ ]  AVSD (AV Canal)

[ ]  Pulmonic Stenosis

[ ]  Pulmonary Atresia

[ ]  TOF (Tetralogy of Fallot)

[ ]  Coarctation of Aorta

[ ]  TOGV (Transposition of Great Vessels or Transposition of Great Arteries)

### [ ]  Truncus Arteriosus

[ ]  Complex biventricular anatomy (i.e. heterotaxy syndrome)

[ ]  Anomalous Pulmonary Venous Return

[ ]  Single Ventricle Variant (hypoplastic left heart syndrome)

[ ]  Other (provide details in Comments)

(You may explain or elaborate on cardiac diagnosis and /or treatment in the Comments section at the end of the form)

Pharmacologic Data:

Surfactant given: [ ]  Yes [ ]  No

 If Yes, 1st dose given at date:  time: # doses of surfactant given:

Pulmonary Hypertension (PHTN):

First ECHO done on date:

PHTN: [ ]  None [ ]  < 2/3 systemic [ ]  between 2/3 and systemic [ ]  > systemic

 Ductus: [ ]  Open [ ]  Closed

 Ductal shunt: [ ]  L to R [ ]  Bidirectional [ ]  R to L

 Atrial shunt: [ ]  Yes [ ]  No

 Tricuspid regurgitation: [ ]  Yes [ ]  No

Last ECHO done on date:

PHTN: [ ]  None [ ]  < 2/3 systemic [ ]  between 2/3 and systemic [ ]  > systemic

 Ductus: [ ]  Open [ ]  Closed

 Ductal shunt: [ ]  L to R [ ]  Bidirectional [ ]  R to L

 Atrial shunt: [ ]  Yes [ ]  No

 Tricuspid regurgitation: [ ]  Yes [ ]  No

Treatment of Pulmonary Hypertension (PHTN):

|  |  |  |
| --- | --- | --- |
| Check if Used | Date Started | Date Ended |
|   [ ]  | Inhaled Nitric Oxide – Maximum dose:  ppm |  |  |
|  [ ]  | Sildenafil [ ]  Oral [ ]  iv |  |  |
|  [ ]  | Endothelial Receptor Blockade |  |  |
|  [ ]  | Prostacyclin |  |  |
|  [ ]  | Alprostadil (PGE1) |  |  |
|  [ ]  | Milrinone |  |  |
|  [ ]  | Other (specify):  |  |  |

**Ventilation:**

Intubated at: Date:  Time:

Extubated at: Date:  **[ ]**  Never extubated

Actual Values in the first 24 hours of life (pre-ECMO):

|  |  |
| --- | --- |
| Highest **pre**-ductal PaO2:   mm Hg  O2 sat: % [ ]  Not available | Highest **post**-ductal PaO2:  mm Hg O2 sat: % [ ]  Not available |
| Highest PaCO2:  mm Hg [ ]  Not available | Lowest PaCO2:  mm Hg [ ]  Not available |
| Highest Lactate in first 24 hours:   mmol/L) | Highest Lactate in first 72 hours:  mmol/L) |

**Side of Diaphragmatic Hernia:** [ ]  Left [ ]  Right [ ]  Bilateral/Central

**[ ]**  **No Repair:** Reasons repair not done (select best):

 **[ ]**  Unable to stabilize patient

 **[ ]**  Patient felt to be non-survivable / not candidate for ECMO:

 [ ]  PaO2 never greater than mm Hg

 [ ]  PaCO2 never lower than mm Hg

 [ ]  Anomaly: Cardiac / Chromosomal / Other

 [ ]  Parents requested no further therapy

 [ ]  Other:

 [ ]  Patient felt to be survivable / not candidate for ECMO:

 [ ]  Prematurity / low birth weight

 [ ]  IVH or cerebral hemorrhage pre-ECMO

 [ ]  Parents requested no further therapy

 [ ]  Other:

 [ ]  Patient felt to be survivable / placed on ECMO but no repair done:

 [ ]  IVH or cerebral hemorrhage on ECMO

 **[ ]**  Other ECMO complication:

 [ ]  Parents requested no further therapy

 [ ]  Unable to wean off ECMO

 [ ]  Late diagnosis of anomaly: Cardiac / Chromosomal / Other

 [ ]  Other:

 [ ]  Patient came off ECMO but was not repaired:

 [ ]  Refractory hypoxia

 [ ]  Refractory hypercarbia

 [ ]  Anomaly: Cardiac / Chromosomal / Other

 [ ]  Parents requested no further therapy

 [ ]  Multisystem organ failure

 [ ]  Sepsis

 [ ]  Other:

**[ ]**  **Repair Done:**

Repair done on done on date:  time:

Diaphragm Defect: [ ]  A [ ]  B [ ]  C [ ]  D

    

(Have surgeon identify which diagram (A, B, C, D) most closely approximates defect noted intra-operatively. Orientation: diagram is drawn with the diaphragm (defect) on the patient’s left and you are looking up from the abdomen towards the chest)

Type of Diaphragm Repair: [ ]  Primary [ ]  Patch

If Patch, type patch: [ ]  PTFE [ ]  Alloderm [ ]  Dacron [ ]  Mesh plug

 [ ]  Muscle flap [ ]  Surgisis [ ]  Other:

Hernia Sac: [ ]  Yes [ ]  No

Liver: [ ]  Chest [ ]  Abdomen

Approach: [ ]  Subcostal [ ]  Thoracic [ ]  Thoracoscopic [ ]  Laparoscopic

 [ ]  Both subcostal and Thoracic [ ]  Other:

Abdominal Closure: [ ]  Primary [ ]  Ventral hernia [ ]  Silo [ ]  Patch [ ]  Other:  Chest Tube: [ ]  Yes [ ]  No

**ECMO Data:**

**[ ]**  Placed on ECMO

 Started ECMO: date:  time:

 Ended ECMO: date:  time:

ECMO Mode: [ ]  VA [ ]  VA (+V) [ ]  VV (DL) [ ]  VV to VA

Main reason for starting ECMO:

 [ ]  Poor oxygenation [ ]  Poor ventilation [ ]  Hemodynamic instability

Data supporting decision:

|  |  |
| --- | --- |
| FiO2: **%** | PaCO2:  mm Hg |
| PaO2:  mm Hg **[ ]** Preductal **[ ]** Postductal | MAP:  |
| O2 sat: % **[ ]** Preductal **[ ]** Postductal | PIP:  |

**[ ]**  Second ECMO run: started at date:  time:

 ended at date:  time:

Mode: [ ]  VA [ ]  VA (+V) [ ]  VV (DL) [ ]  VV to VA

**[ ]**  **Chylothorax**:

If Yes, Date of Dx:

Method of Dx- check all that apply:

 [ ]  Xray

 [ ]  Ultrasound

 [ ]  Examination of pleural fluid

 [ ]  Other:

Intervention (feeding) - check all that apply:

 [ ]  Special feeds started:

 Date:  and type feeds:

 [ ]  TPN started: Date:

 [ ]  CT placed: Date:

 **[ ]**  Ligation of thoracic duct: Date:

 [ ]  Pleurodesis: Date:

Resolution (check all that apply):

 [ ]  CXR: Date:

 [ ]  CT removed: Date:

 [ ]  TPN stopped: Date:

**Other Surgical Procedures** (Check all that apply and provide dates):

**[ ]**  Repair of recurrent CDH Date:

[ ]  Gastrostomy tube (no fundoplication) Date:

[ ]  Fundoplication (with or without G-tube) Date:

[ ]  Lysis of adhesions/ surgery for SBO Date:

[ ]  Closure of ventral hernia Date:

[ ]  Cardiac surgery Date:

 Details of cardiac surgery:

**Outcome:**

**[ ]**  **Death** at date: , time:

Cause(s) of death (check all that apply):

 [ ]  PPHN

 [ ]  Sepsis/Infection

 [ ]  Hemorrhage

 [ ]  Multisystem organ failure

 [ ]  Chronic lung disease

 [ ]  Iatrogenic

 [ ]  Associated anomalies

 [ ]  Other

**[ ]**  **Survived** to discharge home or transfer

 [ ]  Discharge home at date:

 [ ]  Transfer to another hospital at date:

**[ ]** Transfer to in-hospital service for long-term care at date:

Pulmonary Status at **30 Days of Age**:

[ ]  Extubated and on room air

[ ]  Extubated and on nasal cannula  l O2 and  % FiO2

[ ]  Nasal CPAP  cm H2O and  % FiO2

[ ]  On mechanical ventilation:

FiO2  %, Rate , PIP , PEEP

[ ]  On ECMO

Pulmonary status at time of discharge/transfer:

[ ]  Extubated and on room air

[ ]  Extubated and on nasal cannula  l O2 and  % FiO2

[ ]  Nasal CPAP  cm H2O and  % FiO2

[ ]  On mechanical ventilation:

FiO2  % Rate  PIP  PEEP

Eye exam: [ ]  Normal [ ]  Abnormal [ ]  Not done

Head U/S: [ ]  Normal [ ]  Abnormal [ ]  Not done

Head CT: [ ]  Normal [ ]  Abnormal [ ]  Not done

Cranial MRI: [ ]  Normal [ ]  Abnormal [ ]  Not done

Hearing eval: [ ]  Normal [ ]  Abnormal [ ]  Not done

Discharge weight:  kg

**Feeding** at time of discharge/transfer:

 [ ]  po (primarily oral feeds)

 [ ]  ng (primarily gavage feeds)

 [ ]  GT (primarily G-tube feeds)

Date on full enteral feeds:

GER (Gastro-esophageal reflux) diagnosed: [ ]  Yes [ ]  No

If Yes, method of diagnosis: [ ]  Clinical [ ]  UGI [ ]  pH Probe [ ]  Nuclear

If Yes, method of treatment: [ ]  Medical [ ]  Surgical

**Discharge medications** (Check all that apply):

|  |  |
| --- | --- |
| Respiratory:[ ] Diuretics[ ] Inhaled bronchodilators[ ] Inhaled steroids[ ] iNO[ ] Prostacyclin[ ] Sildenafil[ ] Oxygen[ ] Theophylline[ ] Antibiotics[ ] Seizure medications[ ] Sedatives/analgesics | Gastrointestinal: [ ] Prokinetic agents [ ] Antacids(ranitidine, proton pump inhibitors, etc.) [ ] Erythromycin (used to increase motility) [ ] HyperalimentationCardiac: [ ] Digoxin [ ] Captopril [ ] Aspirin(Any medications not listed here, please list in comments section below) |

Additional Comments about this Patient: