Table S1 ***Bicêtre neonatal score for* VoGM** – classification by symptom group

| Points | Cardiac function | Cerebral function | Respiratory function | Hepatic function | Renal function |
|---|---|---|---|---|---|
| **5** | normal | normal | normal | – | – |
| **4** | overload, no medical treatment | subclinical, isolated EEG abnormalities | tachypnea, finishes baby bottle | – | – |
| **3** | heart failure, stable with medical treatment | non-convulsive, intermittent neurologic signs | tachypnea, does not finish baby bottle | no hepatomegaly, normal hepatic function | normal |
| **2** | heart failure, not stable with medical treatment | isolated convulsion | assisted ventilation, normal saturation FiO2 < 0,3 | hepatomegaly, normal hepatic function | transient oliguria/anuria |
| **1** | necessity for invasive mechanical ventilation | seizures | assisted ventilation, normal saturation FiO2 > 0,3 | moderate or transient hepatic failure | unstable diuresis with medical treatment |
| **0** | resistant to medical therapy | permanent neurological signs | assisted ventilation, repetable desaturations | abnormal coagulation, elevated enzymes | anuria |

Table S2 ***Bicêtre neonatal score for* VoGM** – applied to our patients

| Nr. crt. | Patient indicative | Cardiac function | Cerebral function | Respiratory function | Hepatic function | Renal function | ***Total score*** |
|---|---|---|---|---|---|---|---|
| 1. | **Patient 1**<br>□ male, at term | no cardiac failure | normal neuro examination for age | no HTP, no respiratory failure, no acidosis | normal transaminase levels, hyper-bilirubinemia | normal diuresis, normal creatinine and urea levels, normal renal ultrasound | **19** |
| ***Score for each vital function*** | | **+5** | **+5** | **+3** | **+3** | **+3** | |
| 2. | **Patient 2**<br>□ male, at term | dilated right cavities, heart failure stable with medical treatment, elevated levels of CK, CK-MB and troponin T | normal neuro exam for age, *influenced* by analgesia and sedation | assisted ventilation, normal saturation FiO2 < 0,3 moderate to severe flow mediated HTP, no acidosis | temporary multiple etiology jaundice, no hepatomegaly, normal hepatic function | normal diuresis, normal creatinine and urea levels | **16** |
| ***Score for each vital function*** | | **+3** | **+5** | **+2** | **+3** | **+3** | |
| 3. | **Patient 3**<br>□ male, unknown gestational age<br>*pregnancy without follow-up | heart failure resistant to medical therapy, severely dilated | subclinical, isolated EEG abnormalities, moderate | assisted ventilation, repetable desaturations, moderate to | abnormal transaminase levels, altered coagulation | unstable diuresis with medical treatment, no nitrogen | **5** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | right cavities, right to left shunt via PDA and PFO, diastolic retrograde flow, severe tricuspid insufficiency | perinatal asphyxia, corpus calosum dysgenesia | severe flow and resistance mediated HTP, mixed acidosis | | retention, normal creatinine and albumin levels | |
| ***Score for each vital function*** | | **+0** | **+4** | **+0** | **+0** | **+1** | |
| 4. | **Patient 4**<br>□ male, premature baby | severe congestive cardiac failure resistant to medical therapy | subclinical, isolated EEG abnormalities, present (ventriculo-megaly, cerebral atrophy) | assisted ventilation, repetable desaturations, moderate to severe resistance mediated HTP, (chronic) respiratory failure, mixed acidosis | hyper-bilirubinemia, hepatic cytolysis | transient diminuated urinary out, spontaneously recuperated, elevated creatinine, nitrogen retention | **7** |
| ***Score for each vital function*** | | **+0** | **+4** | **+0** | **+1** | **+2** | |
| 5. | **Patient 5**<br>□ male, at term | global cardiomegaly with decreased contractility, resistant to medical therapy, | subclinical, isolated EEG abnormalities, left cerebral hypoplasia | assisted ventilation, repetable desaturations, unspecified HTP | cholestasis, conjugated hyper-bilirubinemia, hepatic cytolysis | unstable diuresis with medical treatment, elevated creatinine, normal urea | **6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | elevated CK and CK-MB | | | | | |
| ***Score for each vital function*** | | **+0** | **+4** | **+0** | **+1** | **+1** | |
| 6. | **Patient 6**<br>□ male, at term | severely dilated right cavities, congestive cardiac failure resistant to medical therapy, elevated CK, CK-MB, NT-proBNP | non-convulsive, intermittent neurologic signs (secondary cerebral lesions) | assisted ventilation, repetable desaturations, severe flow and resistance mediated HTP, metabolic acidosis | jaundice with conjugated hyper-bilirubinemia, hepatic cytolysis, hepatic failure | unstable diuresis with medical treatment, elevated creatinine, nitrogen retention | **5** |
| ***Score for each vital function*** | | **+0** | **+3** | **+0** | **+1** | **+1** | |
| 7. | **Patient 7**<br>□ male, at term | no cardiac failure | normal neuro exam for age | no HTP, no respiratory failure, no acidosis | normal transaminase levels, no cholestasis or hepatic cytolysis | normal diuresis, no nitrogen retention, normal creatinine and albumin levels | **20** |
| ***Score for each vital function*** | | **+5** | **+5** | **+4** | **+3** | **+3** | |
| 8. | **Patient 8**<br>□ female, premature baby | severe right ventricular hypertrophy, severe cardiac | non-convulsive, intermittent neurologic | assisted ventilation, repetable desaturations, | hepatic failure | unstable diuresis with medical treatment, | **4** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | failure resistant to medical therapy, paroxistic supraventricular tachycardia | signs (diffuse cerebral lesions) | severe resistance mediated HTP, pleural effusion, mixed acidosis | | renal acute failure, hypo-albuminemia | |
| ***Score for each vital function*** | | **+0** | **+3** | **+0** | **+0** | **+1** | |
| 9. | **Patient 9**<br>☐ female, at term | right cavities dilated, congestive cardiac failure, rhythm disturbances, refractory hipoTA | normal neuro exam for age, *influenced* by analgesia and sedation | assisted ventilation, repetable desaturations, severe flow and resistance mediated HTP, pleural effusion, metabolic acidosis | cholestasis, hepatic cytolysis, hyperbili, hepatic failure, ascites | unstable diuresis with medical treatment, hypo-albuminemia | **6** |
| ***Score for each vital function*** | | **+0** | **+5** | **+0** | **+0** | **+1** | |

Table S3 ***Clinical and paraclinical features of our patients***

| Aspects regarding the pathological context | | Patients concerned | |
|---|---|---|---|
| Reanimation at birth | | 4/9 | 44,44% |
| Diagnosis | antenatally | 4/9 | 44,44% |
| | postnatally | 5/9 | 55,55% |
| Vascular catetherism | central arterial catether | 4/9 | 44,44% |
| | central venous catether | 8/9 | 88,88% |
| Presence of murmur | cardiac murmur | 6/9 | 66,66% |
| | cerebral murmur | 3/9 | 33,33% |
| Nutrition | total parenteral nutrition | 3/9 | 33,33% |
| | enteral nutrition via NGT + PN | 5/9 | 55,55% |
| | exclusive enteral nutrition | 1/9 | 11,11% |
| Functional and structural imaging | thoracic and abdominal Rx | 6/9 | 66,66% |
| | cerebral ultrasound | 9/9 | 99,99% |
| | cardiac ultrasound | 7/9 | 77,77% |
| | abdominal ultrasound | 5/9 | 55,55% |
| | angio-CT | 2/9 | 22,22% |
| | cerebral IRM | 3/9 | 33,33% |
| | angiography procedure | 0/9 | 0,00% |
| Diuretic medication | Furosemide as unique therapy | 2/9 | 22,22% |
| | Furosemide, Spironolactone | 4/9 | 44,44% |
| Sedation and analgesia | Phentanyl, Midazolam | 5/9 | 55,55% |
| | Morphine | 2/9 | 22,22% |
| Adjuvant medication | prostaglandin E2 | 3/9 | 33,33% |
| | Diazepam | 1/9 | 11,11% |
| | Adenosine | 1/9 | 11,11% |
| | Na bicarbonate | 4/9 | 44,44% |
| | inotropic medication | 7/9 | 77,77% |
| | vasoactive medication | 5/9 | 55,55% |
| Blood products | red cell mass | 5/9 | 55,55% |
| | fresh frozen plasma | 7/9 | 77,77% |
| | plateletes | 3/9 | 33,33% |
| | imunoglobulins | 1/9 | 11,11% |
| | albumin | 3/9 | 33,33% |
| Antibiotherapy | Cefazolin | 1/9 | 11,11% |
| | Cefort | 1/9 | 11,11% |
| | Aminoglycosides | 2/9 | 22,22% |
| | Piperacillin, Tazobactam | 6/9 | 66,66% |
| | Meronem, Vancomycin | 6/9 | 66,66% |
| Inflammatory syndrome | negative CRP, negative PCT | 4/9 | 44,44% |
| | negative CRP, positive PCT | 1/9 | 11,11% |
| | positive CRP, positive PCT | 4/9 | 44,44% |
| Acidosis | respiratory acidosis | 1/9 | 11,11% |
| | metabolic acidosis | 2/9 | 22,22% |
| | mixed acidosis | 3/9 | 33,33% |
| Exitus | | 6/9 | 66,66% |
| Survival rate | | 3/6 | 33,33% |

Table S4 ***Associated pathologies with* VoGM *in our patients***

| Associated pathologies | | Patients concerned |
|---|---|---|
| Atrial septal defect | single orifice | 2/9 |
| | double orifice | 1/9 |
| | with interatrial septum aneurysm | 2/9 |
| | without interatrial septum aneurysm | 1/9 |
| Patent foramen ovale | right to left shunt | 2/9 |
| | left to right shunt | 0/9 |
| Patent ductus arteriosus | right to left shunt | 1/9 |
| | left to right | 1/9 |
| | bidirectional | 2/9 |
| Anomalies of pulmonary artery trunk or branches | PA stenosis | 1/9 |
| | PA dilation | 1/9 |
| Anomalous pulmonary venous drainage | | 1/9 |
| Ventricular septal defect | | 1/9 |
| Valvular regurgitation | mitral regurgitation | 2/9 |
| | aortic regurgitation | 1/9 |
| Paroxistic supraventricular tachycardia | | 1/9 |
| Infectious context | endotracheal colonisation | 1/9 |
| | maternal-foetal infection | 2/9 |
| | early onset neonatal sepsis | 1/9 |
| | late onset neonatal sepsis | 0/9 |
| Hemorrhages | superior digestive hemorrhage | 1/9 |
| | intraparenchymal hemorrhage | 1/9 |
| Cephalhematoma | | 1/9 |
| Perinatal asphyxia | | 1/9 |
| Hypovitaminosis D | | 1/9 |