

psychiatrist versus SOS-PD assessments in 14 patients. The sensitivity was 90.1% (95% CI 75.6–97.9%) and positive predictive value 96.8% (95% CI 90.5–100). The specificity was 96.7% (95% CI 82.7–99.4) and the negative predictive value 90.6% (95% CI 80.5–100). The ICC of 16-paired observations was 0.90 (95% CI 82.7–99.4) for the SOS-PD scale.

**Conclusions** The SOS-PD scale shows promising validity for screening PD. Future research is aimed to establish the psychometric properties in a multicenter study.

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# **DEVELOPMENT OF A PARENT'S GUIDE FOR NEWBORNS WITH HYPOXIC-ISCHAEMIC ENCEPHALOPATHY (HIE) AND THERAPEUTIC HYPOTHERMIA (TH)**

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**Backgrounds** TH is the only available treatment today for infants with HIE and it is considered the standard of care. Being a parent of a baby with HIE treated with TH in a neonatal intensive care is a highly traumatic event.

**Aims** To develop an explicative guide for parents of newborns with HIE receiving TH based on parent's needs.

**Methods** To identify significant issues for parents, a descriptive qualitative study was designed. Study population were parents of newborns with HIE who received TH. Convenience sampling was used, stratified according to the severity of HIE. Two focus groups with 16 parents of newborns with moderate and mild HIE, respectively were performed. Twenty pictures were taken reflecting dimensions and categories extracted from bibliographic review. These images were used to encourage parents discourse. Interviews were recorded prior to parental consent and later transcribed. Inductive content analysis was performed using ATLAS. TI-V.6.2.

**Results** Three themes emerged: HIE information, cooling treatment and coping strategies for parents. The guide developed followed this structure and contents were divided into 16 meaningful questions and a glossary. The final parents guide had a didactic format with simple language, drawings, and parents verbatims. It is annexed to a Spanish clinical practice guide (CPG) on HIE.

**Conclusions** Qualitative results highlight the importance for parents to receive good information about HIE, cooling, and coping strategies. This guide is a tool that could improve family coping during hospitalisation of newborns with HIE and TH. Incorporating parents perspectives in the CPG increase its quality.

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# **CEREBRAL OXYGENATION BEFORE AND AFTER NEUROSURGICAL PLACEMENT OF A VENTRICULAR RESERVOIR IN NEONATES WITH PHVD**

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**Background** There is no consensus regarding optimal timing in treating posthaemorrhagic ventricular dilatation (PHVD). Near-Infrared Spectroscopy (NIRS) is a non invasive method, measuring cerebral regional oxygenation (rScO<sub>2</sub>). rScO<sub>2</sub> values below 40–45% might be associated with cerebral ischaemia.

**Hypothesis:** rScO<sub>2</sub> can provide additional information about cerebral oxygenation in infants with PHVD and may therefore be of value to determine timing of intervention.

**Methods** We measured rScO<sub>2</sub> in 13 neonates before and after neurosurgical placement of a ventricular reservoir. Based on ventricular index (VI; Levene), distinction was made in neonates treated early (VI < p97 + 4 mm) and those treated late for their PHVD (VI ≥ p97 + 4 mm).

**Results** Median GA 31 wks (27–37 wks) and median BW 1750 g (1145–3270 g). Five neonates were treated early and 8 late. In the early intervention group, pre-, and postoperative rScO<sub>2</sub> values were comparable (median 52%, 45–58% IQR vs 57%, 44–60% IQR). Preoperative rScO<sub>2</sub> was lower in the late intervention group compared to postoperative values (median 33%, 26–43% IQR vs 47%, 39–49% IQR).

In 7 late intervention infants rScO<sub>2</sub> was <45% preoperatively, so at risk for cerebral ischemia, In 2 rScO<sub>2</sub> remained <45% postoperatively.

**Conclusions** Neonates with VI ≥ 97 + 4 mm do have a compromised cerebral oxygenation, and usually react to cerebrospinal fluid drainage with recovery of the rScO<sub>2</sub> values to within the normal range. Infants in the early intervention group were within normal range pre- and postoperatively. NIRS might be of additional clinical value in progressive PHVD in order to determine optimal timing for intervention.

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# **CLINICAL IMPLICATIONS OF MRI-PROCEDURE IN PRETERM NEONATES**

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**Background and aim** Magnetic Resonance Imaging (MRI) of the brain at 30 weeks Postmenstrual age (PMA) is part of routine care for preterms born <28 weeks gestational age (GA), because of their high risk of brain injury.

The aim was to evaluate fluctuations in vital parameters following the MRI procedure.

**Methods and patients** We compared clinical parameters in 30 infants 4 h before and after the MRI: number of apneas and bradycardias, changes in oxygen requirement, respiratory support, and rectal temperature. Oral chloralhydrate sedation (30–50 mg/kg) was administered upon discretion of the attending neonatologist.

**Results** Infants had the following clinical characteristics: mean GA 26 + 4 wks (24–28 wks), mean BW 1012 g (610–1520 g), PMA at scan was 30 + 6 wks (29 + 6–31 + 6 wks) with weight of 1397 g (980–1860 g). Infants <1500 g, were transported in an MRI-compatible incubator (26/30). 12/30 (40%) infants were sedated with chloralhydrate.

None of the infants had >4 apneas or >3 bradycardias before the MRI. After the MRI 5 infants (all unsedated) had >4 apneas (5–7 apneas), 2 infants (1 sedated) had >3 bradycardias (5–6). After the MRI, FiO<sub>2</sub> was increased in 10/30 patients, max change 0.06, more respiratory support was needed in 5 infants (3 sedated): PEEP from +4 to PEEP +5 cmH<sub>2</sub>O, and