Early mobilization in critically ill children

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An early mobilization program in critically ill children reduce the consumption of sedatives and opioids and the prevalence of delirium.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON22591

Bron
NTR

Verkorte titel
Early mob

Aandoening

Pediatric delirium, critically ill children

Ondersteuning

Primaire sponsor: Erasmus MC-Sophia Children's Hospital
Overige ondersteuning: Evidence Based Care for Nursing Grant, Erasmus MC

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Prevalence of delirium

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale: Providing early mobilization during the Intensive Care Unit (ICU) stay has shown effective in adults. Evidence in critically ill children is lacking.

Objective: To determine the effect of an early mobilization program in a PICU on the consumption of sedatives and opioids (mg/kg) compared to usual care during the first 28 days. The secondary objective is the determine the prevalence of distress, delirium and withdrawal syndrome after implementation of an early mobilization program.

Study design: An observation before-after implementation study

Study population: Children from 0 to 17 years with the expectation of at least three days admitted to the PICU.

Intervention (if applicable): This quality improvement project involved a usual- care baseline phase, followed by a quality improvement phase that implemented an interdisciplinary, and tiered activity plan to promote early mobilization of critically ill children. Main study parameters/endpoints: 1) Difference in consumption of sedatives/opiods before and after the intervention. 2) Prevalence and duration of delirium, distress, and withdrawal syndrome in intervention group compared with the control group. 3) The number and type of mobilization activities before and after the intervention. 4) Mobilization related adverse events (safety) intervention group and control group. 5) The health status, e.g. Activities of Daily Living (ADL) and sleep after PICU discharge.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: This quality improvement project aimed to change daily practice. After implementation of the early mobilization program the child’s status will be assessed daily. During morning rounds (8hr) the bedside nurse and the attending physician will discuss the child’s safety level regarding sedation level and cardiac and respiratory criteria. Distress and delirium will be measured by the caregiving nurses, because this is standard of care. According to research in adults, early mobilization activities have a positive effect on delirium, use of sedatives, and health status after ICU discharge so we expect these effects for the current intervention group as well. This current study needs to be done in this population because the lack of research about early mobilization and clinical effects in this population.

Doel van het onderzoek

An early mobilization program in critically ill children reduce the consumption of sedatives and opioids and the prevalence of delirium.

Onderzoeksopzet

- 4 months pre-test period

- 8 months post-test

Onderzoeksproduct en/of interventie

This quality improvement project involved a usual- care baseline phase, followed by a quality improvement phase that implemented an interdisciplinary, and tiered activity plan to promote early mobilization of critically ill children.

Contactpersonen

Publiek

Dr. Molewaterplein 60
E. Ista
Rotterdam 3000 CB
The Netherlands
+31 (0)10 7037028

Wetenschappelijk

Dr. Molewaterplein 60
E. Ista
Rotterdam 3000 CB
The Netherlands
+31 (0)10 7037028

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Children with an expected length of stay in PICU of at least 3 days.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

patients with:

- open chest, preexisting chronic neuromuscular disorder, acute spinal cord injuries, anticipated death or withholding life-sustaining therapy.

- no parental consent.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	01-12-2017
Aantal proefpersonen:	60
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	11-12-2017
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL6719
NTR-old	NTR6898
Ander register	Erasmus MC : MEC-2017-1095

Resultaten