Nurses  
Tuesday, March 28th  
14:30-16:00 - Endoume 2  
NG21: Pediatrics

Change of protective isolation in paediatric SCT; from the past to the present and one step back

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Abstract

Intro Paediatric SCT in Europe was first implemented at the Leiden University Medical Centre in 1968. The protective isolation protocol was extensive. Patients were treated in laminar air flow (LAF) units with air filtration (HEPA) until day 100 according to a strict sterile protocol. Parents of the patients were obliged to stick to the same protocol as healthcare professionals (HCP’s) and could hardly participate in the daily care. In 1995 the LAF units changed to Ultra Clean Rooms (UCR) including air filtration (HEPA) and the regime got less strict. Within the rooms, both HCP and parents had to wear gloves, a mask and a disposable apron, but not sterile anymore. Parents were allowed to stay with their child all day but not during the night. These changes improved the quality of the stay and care for patients, parents as well as HCP considerably. The total duration of protective isolation became shorter than in the LAF unit due to new medical insights and changes in supportive care. In 2015 the SCT unit moved to a newly build location within our hospital. Whereas HCP’s had to comply to the same protective isolation guidelines, these were less strict for parents and limited to good hand hygiene on condition that parents had no infectious illness. Moreover, rooming in was also allowed during the night, which improved the quality of the isolation time of the child. After moving to the new unit and implementing the new isolation guidelines, an increase in respiratory viral infections was observed in the SCT patients. Therefore, a retrospective analysis of the occurrence of respiratory viral infections was performed to evaluate the protective isolation guidelines. Patients Two groups of 18 children each, transplanted during the same seasonal period (October-March) in two consecutive years in the former (group A) and new unit (group B) and applying the respective isolation guidelines were compared. Secondly we planned to evaluate the parental experiences with the current isolation rules. Results The frequency of diagnosed respiratory viral infections during the admission for SCT was 6 six out of 18 patients (33%) in group A, and eight out of the 18 patients (44%) in group B. In group A, all infections presented before or after the period of protective isolation. In contrast, in group B five out of the eight patients with a respiratory viral infection were first diagnosed during the period of protective isolation. Results about the parental experiences are pending. Conclusion Our analysis suggests that the higher frequency of viral respiratory infections during the admission period as observed in group B is linked to less strict protective isolation and rooming-in guidelines for parents. This prompted us to revise these guidelines. We ask parents to wear mouth masks in order to further limit the risk of transmitting respiratory viral infections. When parents have a rhinitis or respiratory tract infection we recommend to limit rooming-in. They also have to wear gloves plus an apron and they are not allowed to sleep with the child. Special emphasis is again put on hand hygiene. We as nurses try to keep the balance between optimal parental care and maximal safety for the
patient to avoid infections. As a consequence we have the task to inform and support parents to comply with the hygiene protocol and facilitate optimal contact between patients and parents. Together, this will contribute to an optimal outcome for our patients and their parents.

**Disclosure of conflict of interest**

None
Decreased central line-associated bloodstream infection (CLABSI) rate after intensive training of the nurse staff and implementing a custom made intravenous system, with needle free connector

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Abstract

Introduction Central venous lines are an essential instrument in treating pediatric hematopoietic stem cell transplantation. Preventing and decreasing CLABSI is a major challenge. Objective To decrease the high rate of CLABSI in a pediatric hemato-oncology department action was taken by profound reorganization of the IV system, an intensive training of the nurse staff and by introducing the MicroClave, a needle free connector. Methodology In 2012 it was clear that the number of CLABSI in the pediatric hemato-oncology department was too high in comparison with similar centers: 7.6 CLABSI/1000 tunnelled catheter days (NHSN mean 2.3) and 5.74/1000 port catheter days (NHSN mean 1.7). To reduce this high rate of CLABSI an action plan was worked out: 1) Intensive training session of the nursing staff; 2) Implementation of the Clear MicroClave, a needle free connector system; 3) Implementation of a custom made closed IV system, with less risk of introducing infection in the system. As there was already a lot of experience with the needle free connector in the intensive units in the hospital and as the system meets the recommendations, as published in the recent guidelines of CDC, the choice for the MicroClave Clear system was obvious. The whole process was intensively supported by the infection control department and the multi-professional vascular access team. Results These actions resulted in a dramatic decrease in CLABSI, from 7.6/1000 tunnelled catheter days to 0 at the end of 2015, and from 5.74/1000 port catheter days to 0 at the end of 2015. Conclusion Intensive staff training, introduction of a new IV prepared system and the introduction of a needle free system resulted in a dramatic fall of central line infections on a pediatric hemato-oncology ward.

Disclosure of conflict of interest

None
The core of sibling stem cell donation – a prospective grounded theory approach

Kisch, Annika; Forsberg, Anna

Abstract

Introduction: We know from previous research that sibling stem cell donors are in a vulnerable situation (Kisch et al., 2015; Munzenberger et al., 1999; Pillay et al., 2012; Wiener et al., 2008; Williams et al., 2003). Negative experiences as well as positive experiences, in addition to a closer relationship with the sick sibling have been described. Sibling donors are often concerned about the outcome of the transplantation for their sick sister or brother and feel responsible for doing what is necessary to help a family member (a.a.). The life situation of sibling stem cell donors is most certainly affected by the donation, making it possible that a transition will occur. We know hardly anything about the transitional process that occurs among healthy siblings who donate stem cells to a brother or sister. The focus of this study is how the approach of sibling stem cell donors changes from before the donation to one year after it. The aim of this study was to prospectively investigate the main concerns associated with sibling stem cell donation and how healthy siblings deal with these concerns before and after donation. Methods: Ten healthy sibling donors, 5 men and 5 women, with a median age of 54 years (range 26-66 years) were included in this study when they were due to donate stem cells to a brother or sister. Data were collected prospectively on three occasions (before the donation and three and twelve months after it) through 29 in-depth interviews, which were recorded and transcribed verbatim for analysis by the Grounded Theory method developed by Charmaz (2010). Results: The grounded theory of this study describes the efforts of the ten donors to fulfil their duty as a sibling by doing what they considered necessary in order to help. Their efforts were summarised in a process wherein the grounded theory generated three main categories; Prepare, Promote and Preserve, demonstrating various ways of fulfilling one’s duty. A clear path of transition through fulfilment is evident, starting before the donation and until one year after donation. Additionally, the main categories contain several sub-categories revealing the strategies used to fulfil one’s duty (Figure 1). Conclusion: Being a sibling stem cell donor means doing what you have to do to fulfil your duty and if possible, saving the life of a seriously ill brother or sister. The relationship between the siblings is developed and strengthened by the donation process. Sibling stem cell donation seems to be about fulfilment and a thorough understanding of the social process of fulfilment when donating stem cells to a sibling enables directed and person centred support in every phase of the donation process. It also enables a targeted discussion during the evaluation in order to identify those siblings lacking the core incentive for donation. The self-management support might be more targeted towards the strategies used by the donors to promote and preserve the sibling relationship in particular. This grounded theory constitutes a framework for long-term follow up, i.e. the first post donation year, which is requested by donors but not always delivered by the transplant professionals. It enriches transplant nursing in the delivery of evidence-based care.

References

Charmaz, 2010

Kisch et al 2015

Munzenberger et al 1999
Disclosure of conflict of interest

None
SOME RISK FACTORS FOR COMPLICATED GRIEF IN PARENTS OF CHILDREN WITH CANCER

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Abstract

Introduction: Although there have been major advances in the treatment of childhood cancer, cancer continues to be the leading cause of death in children due to disease. Parents are at risk for psychological disturbance when a child is dying and the threat of the loss of a child can lead to a process of anticipation of grief that may or may not be adaptive. The intensity of parental grief has been attributed to the disruption in natural order that occurs when parents outlive their children, feelings of failure, and breakdown in family structure and so on. Our objective was to investigate the extent of some risk factors for complicated grief among parents whose child died from cancer. Material and Methods: Sample: 22 caregivers of 22 terminally ill children with cancer (9 girls and 13 boys; average: 8,7 years old). Diagnostic were: Leukemia (30%), trunk tumor (25%), Ewing’s sarcoma (20%), neuroblastoma (15%), osteosarcoma (5%) and glioblastoma (5%) Material: Questionnaire for Risk Assessment of Complications in Resolution of Grief, in Primary Caregivers of Children with Cancer. Results: 11 participants in the sample present Feelings and / or emotions of high intensity. Most caregivers do not report uncontrolled symptoms throughout the process, however 10 have experienced moderately stressful uncontrolled symptoms during the last few days. Also included in this dimension is the Delay in the diagnosis of the disease in which most of the participants answered that it was scarce.

Conclusion: According to the observed results we consider it is essential to study the uncontrolled symptoms in the last days, children and parents need a symptom management plan of care. Emotional support and satisfaction of psychic, social, and spiritual needs must also be emphasized. Finally, the importance of communication (maintaining or reinforcing an open relational climate) should be highlighted to handle high intensity feelings/emotions.

References


Keywords: Complicated grief, Risk factors, childhood cancer, palliative care

Disclosure of conflict of interest
There are no conflicts of interest