

Evidence Table

Reference (include title, author, journal title, year of publication, volume and issue, pages)	Evidence level (I-VII)	Key findings, outcomes or recommendations
Bonham, A. (1996) Managing procedural pain in children with burns. Part 1: Assessment of pain in children. <i>International journal of trauma nursing</i> , 2 (3), 68-73.	VII	<ul style="list-style-type: none"> - Managing procedural pain is difficult because of different cognitive and physical development. - Assessment of a child's pain during a burns dressing may be difficult as children may not be able to express or identify where there pain is.
Bonham, A. (1996) Procedural pain in children with burns. Part 2: Nursing management of children in pain. <i>International journal of trauma nursing</i> , 2 (3), 74-77. -	VII	<ul style="list-style-type: none"> - Pharmacological interventions are important in burns dressing changes in the paediatric population but they are not the only methods that can be successful. - Caring for children with burn wounds present special challenges because children are still developing physically and psychologically. - Before a painful procedure the child should be prepared both physically and emotionally. - In paediatrics, family members should be involved in patient care to give them a sense of competence. They also offer the child a sense of security and comfort, helping to alleviate anxiety and enhance pain relief. - The parent and where possible the child should be educated about what causes burn pain, how it is relived and different coping strategies help to relieve pain. - Therapeutic play allows the child to use methods to explore the equipment and act out procedures. - Children should be given the opportunity to choose whether they want to participate in wound care and be allowed to make decisions about how the dressing is performed. - Documentation of pain assessment, effective pain control strategies and the child's response will help ensure that pain management is optimised.
Clifton, L., Chong, L. & Stewart, K. (2015). Identification of factors that predict outpatient utilisation of a plastic dressing clinic. A retrospective review of 287 paediatric burn cases. <i>Burns</i> , 41, 469-475.	V	<ul style="list-style-type: none"> - A retrospective review was performed of all paediatric burn cases to one hospital focusing on presentations to outpatient clinics and inpatient admission times - Multidisciplinary teams optimise patient care in burns patients. The use of dressing's clinic is an important part of the team. - Most simple burns can be managed at home and been seen in outpatient clinics therefore reducing hospital length of stay - This study looked at only one hospital therefore it is hard to apply to further populations

<p>Dhaliwal, K., Lopez, N. (2018). Hydrogel dressings and their application in burn wound care. <i>British Journal of Community Nursing</i>, 23, 24-27.</p>	<p>VI</p>	<ul style="list-style-type: none"> - After a burn injury, skin loses its protective properties. - Hydrogels have been shown to exhibit a number of beneficial properties favourable for burns patients.
<p>Douglas. H. & Wood. F. (2017). Burns dressings. <i>RACGP- Burns dressings</i>. 46, 3.</p>	<p>VII</p>	<ul style="list-style-type: none"> - This paper only reviews the literature. No study was actually performed. - It is important to consider the size of a burn when a dressing is applied. - Deep dermal/ full thickness burns require dressings to debride and lift the dead skin. - Dressings prevent infection; promote wound healing, reducing pain.
<p>Elena Stoica, A., Chircov, C. & Grumezescu, A. (2020). Hydrogel dressings for the treatment of burns wounds: an up to date overview. <i>Materials (Basel)</i>, June; 13 (12) 2853.</p>	<p>VII</p>	<ul style="list-style-type: none"> - This paper is a review of the literature. - Hydrogels provide skin healing - Antimicrobial dressings prevent the needs for drug treating infections in some instances
<p>Holland, Carolyn & A. DiGiulio, Gregg & A. Gonzalez del Rey, Javier. (2012). Wound Care and the Pediatric Patient. 10.1016/B978-0-323-07418-6.00005-8.</p>	<p>VII</p>	<ul style="list-style-type: none"> - Addressing the emotional needs of children and parents is as important as wound care. - If the history is inconsistent with the wounds physical abuse of the child should be considered. - Distraction can be effective at any age using such things as toys, cartoon characters, songs, dummies, blankets and colours. Children are often distracted well with visual imagery. - Special attention should be paid to the immunisation status of children with burns. This can be achieved by simply asking parents. - Often there are times where a child is unable to cope with the pain of the procedure therefore the use of pharmacological sedation may be required.
<p>Kitney, P., Tam, R., Bennett, P., Buttigieg, D., Bramley, D. & Wang, W. (2017). Handover between anaesthetists and care unit nursing staff using isbar principles: a quality improvement study. <i>Revue de l'AHSOC</i>, 27</p>		<ul style="list-style-type: none"> - A structured approach to communication between health care professionals containing introduction/identification, situation, background, assessment and request/recommendation (ISBAR).

<p>Kee, E., Kimble, R., Cuttle, L., Khan, A. & Stockton, K. (2015) Randomized controlled trial of three burns dressings for partial thickness burns in children. <i>Burns</i>, 41, 946-955.</p>	<p>III</p>	<ul style="list-style-type: none"> - Effective wound healing treatments are imperative in burns wound management of the paediatric patient. - There is a lack of evidence and trails comparing silver dressings to each other in the paediatric population. - The study compared the effects of three silver dressings on small to medium size acute partial thickness burns in children, focusing on re-epithelisation, pain and distress. - 96 children were included in the analysis from one hospital. - The results of this study indicate that <10% TBSA partial thickness burns in children 0-15years, dressed with Mepilex Ag re-epithelialised significantly faster than those with Acticoat. Children also experienced less pain on dressing removal and application. - Sample size of this study is small and only included one hospital population.
<p>Langschmidt, J., Caine, P., Wearn, C., Bamford, A., Wilson, Y. & Moiemann, N. (2014). Hydrotherapy in burn care: A survey of hydrotherapy practices in the UK and Ireland and literature review. <i>Burns</i>, 40, 860-864.</p>	<p>VI</p>	<ul style="list-style-type: none"> - Hydrotherapy is commonly used in burns management - There may be risks associated with the use of hydrotherapy including infection - A survey included 28 burns care providers using hydrotherapy was conducted. Only 11 used a defined criteria in the use of hydrotherapy with many variations to practice noticed - The use of hydrotherapy should be done with enforced infection control procedures - Hydrotherapy for burns management is used nationwide however high variation in practice exists.
<p>Liao, A., Andreson, D., Martin, H., Harvey, J. & Holland, A. (2013). The infection risk of plastic wrap as an acute burns dressing. <i>Burns</i>.</p>	<p>VI</p>	<ul style="list-style-type: none"> - Plastic wrap has been recommended as an appropriate burns dressing. There are limited studies reporting the risk of infection with this dressing. - Ten plastic wrap samples were collected from an open roll on a burns unit. Plates were then imprinted with the plastic and incubated. - There was no significant growth on the plates after incubation indicating that the potential risk for plastic wrap to act as a fomite when used, as an acute burn, wound dressing is low. - Sample size for this study is small and there has been no control used in the study.

<p>McGarry, S., Elliott, C., McDonald, A., Valentine, J., Wood, F. & Girdler, S. (2014). Paediatric burns: From the voice of the child. <i>Burns</i>, 40, 606-615.</p>	<p>VI</p>	<ul style="list-style-type: none"> - This study uses a qualitative methodology to explore the psychological experiences of children with burns. - The sample size of this study was small with only 12 surveys completed. This makes application to the larger population difficult. - Burns are described as one of the most painful injuries a person can experience. In addition to the burn itself children may experience surgery, invasive procedures and are often left with permanent scarring. Burns not only affect a child's physical appearance but also psychologically, socially and functionally. - Dressing changes are imperative to the physical outcome of burns however children fear not knowing about the dressing changes. Preparatory information about medical procedures reduces distress. - Procedural preparation recommends age appropriate content, format and timing. - Appropriate pain management is fundamental to minimising the onset of secondary complications such as anxiety. In addition to pharmacological methods of pain control, non-pharmacological methods of are just as important. Non-pharmacological techniques have been proven to reduce pain and anxiety in burns dressing changes. - Non-pharmacological methods include; distraction, relaxation techniques, and preparation/education.
<p>Selig, H., Lomonta, D., Giretzlehner, M., Jeschke, M., Upton, D. & Kamolz. (2012). The properties of an "ideal: burn wound dressing- What do we need in daily clinical practice? Results of a worldwide online survey among burn care specialists. <i>Burns</i>, 38, 960-966.</p>	<p>VI</p>	<ul style="list-style-type: none"> - An online cross sectional survey was completed by burns care providers across the globe focusing on daily practice to develop an "ideal" burns wound dressing - Results from the study indicate that: - "Ideal" wound dressing features include a non-adhesive, absorbent and antimicrobial property containing. It should be easily removable and only require changes once per week. - Antimicrobial activity is the most essential property of a burns dressing due to burns incurring a high potential risk for infection. - Absorbency is also essential of a burns dressing. - This survey included a number of worldwide burns care providers therefore is easily applied to the larger population. The study however is based on individual's opinions.

References

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