44 - HYDROCOLLOID PATCH AS A STRATEGY FOR PRESSURE ULCER PREVENTION: SEEKING EVIDENCE FOR NURSING

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INTRODUCTION

The loss of skin integrity, resulting in wounds known as pressure ulcers is a theme of discussion and concern among health professionals and refer mainly to the nurse's actions in reinforcing prevention on the bedridden patient. It's up to nursing to predict, prevent and intervene in care, through constant evaluations of skin integrity so as to improve client assistant quality at any stage of the illness-health process (COSTA, 2005).

Despite modernization in healthcare, pressure ulcer (PU) incidence in hospitalized patients remain high, that is, between 7% to 29% and 33% on critical patients hospitalized in ICUs, constituting an important cause for morbid-mortality and directly affecting life quality of the diseased and their caretakers (COSTA, 2003; PAUL; KELLER, 2002).

Furthermore, PUs constitute an unbearable economic burden on health services, increasing hospitalization time up to fivefold and increasing the risk of death four and a half times, compared to the same previous mortality risk of patients who didn't develop pressure ulcers (SOUZA; SANTOS, 2007).

Because about 95% of PUs are avoidable, it's essential to use all available means in order to effectively prevent these wounds. To that end, several strategies have been employed as prevention methods, from basic procedures to the use of devices that help relieve pressure, shearing and/or friction on bony protrusions (RIBEIRO, 1999).

The hydrocolloid patch is an auto-adhesive device that appeared in the market for the treatment of pressure ulcers, but it's been constantly used for the protection of areas at risk of PU formation, especially in the relieving of friction and shearing on healthy skin.

These materials are currently presented in the market in different thickness and sizes for different body regions. As for their thickness, the appearance of thin patches allowed a better conformation to bony protrusion areas and greater transparence, thus improving visualization of the area at risk of developing a wound.

It's been observed, however, that decision-making in the preventive use of hydrocolloid patches has not been based on scientific evidence, but on the nurse's individual experience and decision, often differing among different institutions and even inside the same institution, and thus lacking in guiding principles that base this practice on evidence.

From the presupposition that decision-making for a practical direction shouldn't be based on individual opinion, but rather guided on the best available data, considering security on interventions and ethics in all actions, we ask: is the use of hydrocolloid patches an assuredly effective device for the prevention of pressure ulcers on bedridden hospitalized patients?

Based on this question, we have as our objective to identify, through a search for evidence, whether the use of hydrocolloid patches is an effective device for the prevention of pressure ulcers.

METHOD

Evidence-Based Practice (EBP) comprises the conscious, explicit and judicious use of the best current evidence to aid decision-making on individual patient care, consisting on a step-based process that integrates individual clinical competence with the best available scientific evidence.

Based on this process, we began studies based on the three operational steps for EBP execution: 1) the need for care observed on a patient or a group of patients converted into a question; 2) bibliographic research of the best evidence related to the question; 3) evaluation of found evidence in terms of methodological validity and reliability, as well as its clinical applicability (BORK, 2005).

According to Flemming's approach, we elaborated our question based on the situation (bedridden hospitalized patients), intervention (use of the hydrocolloid patch) and result (effectiveness on the prevention of ulcer formation).

The study was developed in the period of April to May 2008, trough bibliographic research in the MEDLINE, LILACS, SCIELO and Centro Cochrane do Brasil databases, using a search pattern based on the descriptors: Úlcera de Pressão, Prevenção, Curativos Hidrocolóides.

The adopted selection criteria was of those which correlated the use of the hydrocolloid patch with pressure ulcer prevention.

45 works were found that cite the use of the hydrocolloid patch, however most of the articles were excluded because they related the hydrocolloid patch as a therapeutic measure for the treatment of pressure ulcers.

The sample was composed of only four articles that directly approached the use of the hydrocolloid patch for the prevention of pressure ulcers, which were analyzed and interpreted according to the study's objective, employed methods and results analysis, followed by a discussion of its application, after an evaluation of relevant evidence for assistance practice.

RESULTS AND DISCUSSION

In the study initially developed by Bergstrom et al. (1992) and revised in 2003, directives for the prediction and prevention of PUs were created based on a systematic review of 800 articles. Recommendations were supported by common practices reflected on articles and book chapters and evaluated by expert opinion on the National Pressure Ulcer Advisory Panel (NPUAP), International Association for Enterostomal Therapy (IAET) and Association of Rehabilitation Nurses (ARN) and each recommendation was defined according to evidence strength. The use of hydrocolloid patch as a device to reduce ulcers from external friction and shearing factors obtained grade C recommendation.

In the study of Louro, Ferreira and Póvoa (2007), wuth a descriptive and prospective study, the evaluation of a protocol for prevention and treatment of pressure ulcers was developed. The prevention protocol was based on the implementation of an evaluation scale of the different risk types. The frequency of care was based on the patients' risk evaluation.

In cases of patients with high risk and hyperemic areas, the use of hydrocolloid patches was recommended as a reducer of friction and shearing, associated with other hygiene and comfort measures, position changing and skin hydration. With the implementation of these joint actions, the protocol reached 79% effectiveness in its application, thus recommending the use of the patch for the reduction of friction and shearing factors. The authors conclude, however, that PU prevention requires the association

of measures and that a single measure adopted by itself cannot be a predictive factor for these wounds' prevention.

Reddy, Gill and Rochon (2006) developed a systematic revision on interventions for UP prevention. 59 clinical tests were selected with the intention of evaluating recommended interventions. Interventions were grouped in three categories and analyzed according to methodological rigor, considered variable and below the ideal standards.

Considering current evidence, then, the use of surface supports, the patient's repositioning, nutritional state optimization and skin hydration were found to be adequate strategies for the prevention of pressure ulcers. Furthermore, materials such as the use of the hydrocolloid patch were analyzed in some studies for the reduction of friction and shearing forces, however several of them had important methodological limitations. Through this revision, thus, studies with better delimitation and significant samples are suggested in order to indicate interventions with supporting devices in prevention, as well as to provide cost-benefit data.

In the study of Souza, Santos and Silva (2006), a quantitative, prospective and longitudinal approach was taken, aiming to identify PU incidence on clients hospitalized in ICUs and evidence of nursing care with the application of the predictive evaluation and therapeutic recommendations proposed by Braden.

Thus, the study's result was based on the amount of times in which the nursing procedures were performed on patients intending to reduce stress factors that trigger PUs. Among these procedures, in Braden's recommendation for friction and shearing forces, hydrocolloid patches were used. There was, however, no statistically significant difference among patients who used or didn't use this device. Among factors that interfered in this result, the insufficient sample size for a greater significance and insufficient or unavailable material resources for use on patients were cited. Thus, the application of hydrocolloid patches cannot be conclusive in the reduction of the friction and shearing factors, and other associated measures were the actual aid in guaranteeing the effectiveness of pressure ulcer prevention.

Rocha, Miranda and Andrade (2006) authored a study seeking evidence on the therapeutic approach of PU treatment and prevention which could support clinical practice. Regarding pretention strategies, a flowchart was developed based on risk stratification, through clinical evaluation, the application of the Braden Scale and the adoption of directed preventive measures.

The hydrocolloid patches were thus indicated as devices for the prevention of friction and shearing wounds, but they don't replace the need for regular and adequate repositioning.In this sense, the authors conclude that, despite consensual indication there is currently not enough evidence to recommend the option for this material, in terms of cost-benefit relationship and patient characteristics.

CONCLUSIONS

With the analysis of the selected studies, we observed that the hydrocolloid patch has been frequently cited as an assisting device in the prevention of PUs, when related to friction and shearing forces. However, the low level of evidence in the studies doesn't definitively solve our question on its conscientious, explicit and judicious use based on the best current evidence.

Although the use of the hydrocolloid patch is cited as a reducing factor for friction and shearing forces by the ACHPR, it does not provide us with enough data to be a strong guideline in decision making, since its recommendation has C-grade evidence.

That said, this care practice in nursing must be based on studies with more evidence and better recommendation. To that end, we suggest research is developed that can bring evidence of the hydrocolloid patch as an assuredly effective device, which actually has good clinical application and assuredly effective, presenting adequate cost-benefit and accessible to any patient who might need it.

Even with all the research produced in the prevention thematic realm, it's difficult to accept that, although surrounded by high technology, we still find patients that suffer with the development of PUs during hospitalization.

That said, our mission must be supported on scientific principles based on the building of knowledge, so the conscious use of better evidence can be determinant on the planning of care given to these patients, mainly seeking the quality of assistance;

KEYWORDS: PRESSURE ULCER; PREVENTION; HYDROCOLLOID PATCHES.

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HYDROCOLLOID PATCH AS A STRATEGY FOR PRESSURE ULCER PREVENTION: SEEKING EVIDENCE FOR NURSING

ABSTRACT

Introduction: Pressure Ulcers (PUs) increase patient morbidity, mortality and hospitalization time, lowering life quality. The hydrocolloid patch, a self-adhesive device used in the treatment of these wounds, has been used as a preventive strategy in the reduction of friction and shearing forces. However, it's been observed this practice is based on the nurse's individual decision, with no scientific basis. Objectives: to identify in literatyre studies that cover the use of hydrocolloid patches as an effective device on the prevention of PUs. Method: bibliographical research on MEDLINE, LILACS, SciELO and Centro Cochrane do Brasil databases, by

descriptors: Úlcera de Pressão, Prevenção, Curativos Hidrocolóides. The articles were analyzed regarding the study object, employed methodology, result analysis and clinical application. Results And Discussion: the selected studies present a consensus on the use of hydrocolloid patches as an assisting material in the reduction of friction and shearing forces. There is, however, not enough evidence strength to recommend its use, since the patches received C-grade recommendation in the systematic revision study. Conclusions: the use of hydrocolloid patches associated with other measures has been a strategy for PU prevention, however its effectiveness has been questioned given the low evidence in studies. It is thus necessary to proceed with randomized clinical studies so this practice can be based on the best available scientific evidence, with acceptable cost-benefit and accessible to any patient.

KEYWORDS: Pressure Ulcer, Prevention, Hydrocolloid Patches.

LA PLAQUE D'HYDROCOLLOÏDE COMME UNE STRATÉGIE DE PRÉVENTION DE L'ULCÈRE DE PRESSION : LA RECHERCHE D'ÉVIDENCES POUR LE TRAVAIL DES INFIRMIERS

RÉSUMÉ

Introduction : Les ulcères de pression (UPs) augmentent la morbimortalité ainsi que la durée de l'hospitalisation des patients, en compromettant, pour ce qui les concerne, la qualité de la vie. La plaque d'hydrocolloïde, dispositif auto-adhérent utilisé dans le traitement de ces lésions, est devenue une stratégie préventive dans la réduction des forces de friction et de cisaillement. On observe cependant que cette pratique dépend d'une décision individuelle de l'infirmier, n'étant pas fondée scientifiquement. Objectifs : Identifier dans la littérature des études concernant l'utilisation de la plaque d'hydrocolloïde comme un dispositif efficace dans la prévention des UPs. Méthodologie : Recherche bibliographique effectuée dans les bases de données MEDLINE, LILACS, SCIELO et au Centro Cochrane do Brasil, en fonction des descripteurs : Ulcère de Pression, Prévention, Pansements Hydrocolloïdes. Les articles ont été analysés par rapport à l'objectif de l'étude, à la méthodologie employée, à l'analyse des résultats et à l'application clinique. Résultats et discussion : les auteurs des études sélectionnées sont unanimement favorables à l'utilisation de l'hydrocolloïde comme un matériel auxiliaire dans la réduction des forces de friction et cisaillement. Cependant, on ne saurait recommander son utilisation, étant donné que la plaque a obtenu un niveau de recommandation C dans l'étude de révision systématique. Conclusions : L'utilisation de l'hydrocolloïde associé à d'autres mesures a joué un rôle stratégique dans la prévention des UPs. Son efficacité continue néanmoins d'être mise en cause en raison de la faible évidence des études. Ainsi, il est nécessaire d´effectuer des études cliniques randomisées, afin que cette pratique soit fondée sur les meilleures évidences scientifiques disponibles, avec un rapport coût-bénéfice acceptable et accessible à tous les patients.

MOTS-CLÉS : Ulcère de pression, Prévention, Pansements hydrocolloïdes.

LAS VENDAS HIDROCOLOIDALES COMO UNA ESTRATEGIA DE PREVENCIÓN DE ÚLCERAS POR PRESIÓN: LA BÚSQUEDA DE PRUEBAS PARA LA ENFERMERÍA

RESUMEN

Introducción: las úlceras por presión (UP's) aumentan la morbilidad y la duración de los pacientes en el hospital, hay también la reducción de su calidad de vida. Las vendas hidrocoloidales, dispositivo de auto-adhesivo que se utiliza para tratar estas lesiones, se ha utilizado como una estrategia preventiva para reducir las fuerzas de fricción y cizallamiento. Sin embargo, se observa que esta práctica se basa en la decisión de la enfermera, sin fundamento científico. Objetivos: identificar en la literatura estudios que traten de la utilización de las vendas de hidrocoloidales como un dispositivo para la prevención eficaz de UP's. MÉTODOS: búsqueda bibliográfica en las bases de datos MEDLINE, LILACS, SciELO y Centro Cochrane de Brasil, los descriptores: úlcera por presión, prevención, vendas hidrocoloidales. Los artículos fueron analizados por los objetivos del estudio, metodología, análisis de resultados y la aplicación clínica. Resultados y Discusión: Los estudios seleccionados muestran un consenso para la utilización de las vendas hidrocoloidales para ayudar en la reducción de las fuerzas de fricción y cizalla, pero ya no hay pruebas suficientes para recomendar su uso, ya que la junta había recibido una recomendación de nivel C en el estudio de revisión sistemática. Conclusiones: el uso de las vendas hidrocoloidales en combinación con otras medidas, ha sido una estrategia para la prevención de UP's, pero su eficacia ha sido cuestionada por la evidencia del centro. Por lo tanto, es necesario llevar a cabo ensayos clínicos aleatorios, que esta práctica se basa en la mejor evidencia científica disponible, con relación coste-beneficio y accesible a cualquier paciente.

PALABRAS CLAVE: Úlcera por presión, prevención, Vendas Hidrocoloidales.

A PLACA DE HIDROCOLÓIDE COMO ESTRATÉGIA DE PREVENÇÃO DA ÚLCERA DE PRESSÃO: A BUSCA DE EVIDÊNCIAS PARA A ENFERMAGEM

RESUMO

Introdução: as úlceras de pressão (UP's) aumentam a morbimortalidade e o tempo de internação dos pacientes, diminuindo a sua qualidade de vida. A placa de hidrocolóide, dispositivo auto-aderente que é utilizado no tratamento dessas lesões, passou a ser utilizado como estratégia preventiva na redução das forças de fricção e cisalhamento. Porém, observa-se que esta prática é baseada na decisão individual do enfermeiro, sem fundamentação científica. Objetivos: identificar na literatura estudos que abordem o uso da placa de hidrocolóide como dispositivo eficaz para prevenção das UP's. Metodologia: pesquisa bibliográfica nas bases de dados MEDLINE, LILACS, SciELO e Centro Cochrane do Brasil, pelos descritores: Úlcera de Pressão, Prevenção, Curativos Hidrocolóides. Os artigos foram analisados quanto ao objetivo do estudo, metodologia empregada, análise de resultados e aplicação clínica. Resultados e Discussão: os estudos selecionados apresentam consenso para utilização do hidrocolóide como material auxiliador na redução das forças de fricção e cisalhamento, porém não há força de evidência suficiente para recomendar o seu uso, visto que a placa obteve nível de recomendação C no estudo de revisão sistemática. Conclusões: o uso do hidrocolóide associado a outras medidas tem sido estratégia para prevenção das UP's, porém sua eficácia ainda tem sido questionada pela baixa evidência dos estudos. Assim, faz-se necessário a realização de estudos clínicos randomizados, para que esta prática seja fundamentada nas melhores evidências científicas disponíveis, com custo-benefício aceitável e acessível a qualquer paciente.

PALAVRAS CHAVE: Úlcera de Pressão, Prevenção, Curativos Hidrocolóides.

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