Essay on management of atopic dermatitis in infants

Business, Management

Atopic dermatitis is a chronic, relapsing, and debilitating disease that can cause lifetime impairment of the quality of life of the affected individual. Standard management of the disease includes pharmacological therapeutics but these do not work for everyone. Current management of atopic dermatitis focuses on the control of inflammation and infection of the skin and to the avoidance of triggering factors, like irritants and allergens. A strong correlation has been found between food allergies and the development of atopic dermatitis in children, and restricted diets have been found to reduce the risk of AD or modify its symptoms. Severe cases may benefit from immunotherapy.

Key words: atopic dermatitis, allergens, irritants, immunosuppressants

Management of Atopic Dermatitis in Infants

Best practices

The most common symptoms of AD include puritus and inflammation, thus it follows that a nursing plan for the management of AD should parallel the guidelines for the treatment of impaired skin integrity (Guidelines on the Management of Atopic Eczema, 2006). The first step would be to evaluate the degree of disruption of epidermal and dermal tissue, focusing on the presence of denuded skin, erythema, or lesions (Guidelines, 2006). The primary goal is to maintain or develop clean and intact skin to prevent exacerbation of the disease and bacterial infection (Guidelines, 2006).

The next step is to assess the infant’s current treatment protocol in order to determine any gaps in the current management of the disease. These gaps may include improper use of medications, contraindicated diets, poor

nutrition, deficient monitoring of skin integrity, improper bathing techniques, or the presence of allergens (Krafchik, 2011). Nails should be kept short, and mittens may be recommended to decrease skin breakdown from scratching (Guidelines, 2006).

Furthermore, people caring for children with symptomatic AD may benefit from written guidelines for the management of AD in children, including skin care, bathing procedures, and dietary protocols. In addition, caretakers of infants with AD often suffer from sleep disruption and may lack the focus to remember verbal instructions (Guidelines, 2006).

Finally, long-term care of infants with flaring AD can be stressful; therefore, a nurse should look for signs of psychological stress and offer emotional support and referrals to specialists. There is a danger that low quality of life in the caretaker may impact the wellbeing of the infant.

Published guidelines

The following are three of the most comprehensive guidelines for the treatment and management of atopic dermatitis in infants.

1. National Collaborating Centre for Women's and Children's Health. (2007). Atopic eczema in children. Management of atopic eczema in children from birth up to the age of 12 years. London (UK): National Institute for Health and Clinical Excellence (NICE); (Clinical guideline; no. 57).

2. British Association of Dermatologists & Primary Care Dermatology Society.

(2006). Guidelines on the management of atopic eczema, 39. Access at:

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3. National Institute for Health and Clinical Excellence. (2007). CG57 Atopic eczema in children: understanding NICE guidance. Access at: http://guidance. nice. org. uk/CG57/PublicInfo/pdf/English

Clinical pathways

The management of atopic dermatitis is a major therapeutic challenge; while some patients respond to a variety of medications, others fail to respond to any form of medication (Halken, 2004). In addition, certain therapies may be effective but may be also associated with metabolic complications; furthermore, the use of certain medications is to be avoided in infants altogether.

Generally, a standard therapeutic regimen should aim to achieve the following:

1. Maintain the natural surface lipid barrier of the skin
2. Control symptoms with topical medications, like corticosteroids
3. Use systemic immunosuppressive agents for therapy-resistant patients
4. Avoid factors that exacerbate the condition, especially those that may induce sweating or block hair follicles in the epidermis
5. Avoid triggering factors. For infants, this entails strict monitoring of dietary intake (Marini, 1996).
6. Control bacterial infection of the skin

Some cases of AD are caused by a mutation in the gene for fliaggrin, a protein in the skin that helps holds in moisture; therefore, emollients are recommended for all patients to enhance the barrier function of the skin. Emollients may be sufficient to manage symptoms in some patients,

including itchy skin and pain (Halken, 2004), the use of emollients has been shown to counteract the effects of steroid in infants with moderate to severe AD, and also to reduce exposure to pathogens and sensitising antigens. Emollients that contain ceramide have been found to be effective and safe in treating AD in paediatric patients (Halken, 2004).

Topical corticosteroids are the gold standard for the management of AD (Krafchik, 2011); they can reduce inflammation and control pruritus. Some parents avoid using corticosteroids in their infant children due to concern over systemic side-effects; however, there are a number of topical steroids available that have been specially formulated for infants with symptoms of AD and proven to be safe (Krafchik, 2011).

Patients who are resistant to corticosteroids may benefit from systemic immunosuppressive agents. Mycophenolate and ciclosporin have been found useful in the treatment of both adult and paediatric patients with treatment-resistant AD (Krafchik, 2011). Antibiotics should only be used in extreme cases with cutaneous infection (Krafchik, 2011).

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