Journal article review

Topic: Incontinence Associated Dermatitis

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At the ICS conference in Brazil in 2014 I attended a workshop best practice update on *Incontinence Associated Dermatitis* (IAD). At this workshop the nursing presenters were advising that the current grade of evidence for managing IAD was for Silicone (Dimethicone) cream (Grade level B evidence) compared to Zinc cream (level C evidence). Our service had always used zinc cream and found it convenient to obtain free samples of *Sudocrem.*

Our multidisciplinary team has found that using zinc cream has been mostly successful for treatment of 'simple' IAD. Used in conjunction with a structured skin care regime including:

- *Cleansing* –no soap products; use of PH neutral product
- *Barrier-* protection from urine and faeces
- *Regular pad changes if wet or soiled*
- *Minimising the use of pads only to what is needed to reduce length of skin contact*
- *Maximising nutrition and hydration*
- *Regular monitoring of skin integrity*
- *Treatment of potential coexisting pathogens eg. Candida Albicans "Thrush"*

It was simple until I met Mr JW.

He is an 84 year old man living alone who presented to our service with intact mild anal excoriation secondary to faecal incontinence. There were multiple barriers to his skin not responding to treatment that included: *reduced mobility and sitting for prolonged periods at his table; poor dietary intake impacting upon his nutrition; smoking impacting upon his oxygenation and circulation, inability to titrate aperients related to suspected reducing cognition resulting in prolonged faecal incontinence.* A skin care regime did not work for Mr JW and it bothered me that despite several cream changes over several months that included zinc and silicone and then cortisone by the GP, pressure relief with a Roho cushion and Dietetics and Geriatric involvement I could not improve his dry excoriated skin.

When it was my turn to do our Continence Service *Journal Club* I thought I would select the topic IAD. It prompted me to further explore the literature to see if I could have managed Mr JW better and to get an update on what is the latest recommended skin products to use as it did not seem common knowledge within my circle of continence nursing peers that Silicone was recommended over Zinc based creams as per the recommendations at the 2014 Brazil Conference.

In 2016 the Cochrane library review for IAD treatment indicated that current research trials were small and inconclusive and not one cream is more effective or can be recommended over another.

What is now best practice in 2018?

From my experience there can be confusion within clinical settings as to what is the best approach to take with IAD skin care from multiple health care professionals. Talking to several Wound Care Consultants they seem to have their own personal preferences as to what cream they have had more success with treating IAD. One CNC said "Conveen Critic cream" one said "Cavilon barrier cream". The same with Continence nurses I guess, we all use what we have had the most success with, like our service using *Sudocrem*.

The question of evidence based IAD treatment has directed me to the article *"Effectiveness of topical skin products in the treatment and prevention of incontinence associated dermatitis: a systematic review"* by P. Pather et al; pg. 1473-1496 from The Joanna Briggs Institute 2017 Database of Systematic Reviews and Implementation Reports.

This review aimed to look at the published literature from 1980 to 2016 to determine the current evidence to guide best practice for IAD skin care in adults and which product is most effective?

The article sited the emergence all the time of new products on the market and the fact now that products can come in different application methods eg *"they may be packaged as liquid, emulsion, cream, spray, foam, gel, towelette, wipe or washcloth"* which impacts upon the choices we make as clinicians. The new variation in formulas can confuse clinicians as well when we need to know does this product *cleanse, moisturise* or is it *a barrier* product?

This review considered the products used to treat and prevent IAD in terms of the application method, the active ingredients of the product, the frequency of the applications and what skin care bundles or regimes were effective. The ingredients studied were Petrolatum, Zinc Oxide, Acrylate Polymer and Dimethicone.

Ten studies met the criteria following a systematic database literature search and a total of 804 men and women were included in the final review with sample sizes of between 10 and 177 participants. This was deemed a limited number by the authors.

Determining the outcomes was measured by IAD absence or non -development, the reduction or resolution of IAD, a new development or increase of IAD and the adverse effects upon IAD.

As expected the outcome is still the same given the limited quality trials being undertaken.

"There is insufficient evidence to recommend a single skin care product for treating or preventing IAD in any care setting as the current evidence lacks rigor and consistency".

What I did learn from my journal article readings was for Mr JW I should have attended to:

- *Moisturising* –rehydrating the skin to reduce dryness

This is part of the recommendations for good continence skin care and for all clients with IAD should include *cleansing, moisturising,* and *barrier* protection. In our service we recommend *QV sensitive wash or alternative* for cleansing the skin and provide a free sample of QV to our clients. So is using *Sudocrem* alone sufficient for providing moisture as well? This is a known barrier because of the zinc oxide and it also has Lanolin, paraffin and wax as ingredients. For Mr JW it did not work but for most of our other clients it does. I know that the Hartmann's Menalind Professional range is also popular with many Continence nurses and includes all three skin care requirements.

It goes to show that continence skin care like all of our nursing interventions is required to be *individualised* and centred upon the personalised needs of our clients.