Maintaining peristomal skin health after total laryngectomy
Maintaining peristomal skin health after a laryngectomy

• How much of a problem is skin irritation for laryngectomized patients
• What are the underlying causes and contributions to skin irritation
• What can be done to manage skin irritation and improve nighttime HME use.

About 50% of patients report skin becoming irritated after wearing adhesives. Patients give their skin a ‘break’ from adhesive and HME use. Reduced HME compliance may lead to increased coughing and more disturbed sleep.

Skin irritation can be reduced by using skin-friendly change routines and using adhesives that help recover the skin.

There are skin friendly adhesives available but not widely used. The extent of this problem might be under estimated. There is a clear need to address skin irritation issues to improve pulmonary health.

Red Associates, 2019

Skin irritation leads to non-compliant HME use which leads to reduced pulmonary health – a challenging relationship
How much of a problem is skin irritation for laryngectomized patients?

Quantitative patient study shows skin becoming irritated after wearing adhesives and adhesives don’t stay on due to stoma shape

Out of 729 patients, 47% reported taking a break from using an HME and adhesive, 87% did so at night

Despite having highest degree of trust in their clinician for advice, a majority of patients report not speaking about their issues

Atos Medical Survey, 2015

Red Associates, 2019
Skin irritation is caused by mechanical skin stripping, maceration and contact dermatitis

Mechanical skin stripping

- Incorrect removal of the adhesive strips the skin
- Protective top layer of epidermal cells is removed
- Fissures and cracks from exposed dermis pose risk for infection

Maceration

- Oversaturation from excessive mucus on the skin
- Mucus contains enzymes that can breakdown the skin
- Exudate from moist desquamation causes maceration cycle

Contact Dermatitis

- Irritation from presence of adhesive. Could be either irritant contact dermatitis or allergic contact dermatitis
Radiation dermatitis with symptoms including:

- Erythema
- Dry desquamation
- Moist desquamation

Aging skin and specific patient factors

- Aging skin becomes more fragile as less collagen, oil, elasticity and blood supply
- Patient specific factors that can increase risk include allergies, autoimmune conditions, diabetes, immunotherapies, genetic factors and medications

Stomal topography

- Deep, irregularly-shaped stomas often requires additional adhesion to get a proper seal which may have a negative effect on the skin

McNichol et al. 2013; Rippon, White & Davies, 2007; 3M, 2017
What can be done to manage skin irritation and improve nighttime HME use

Support patients to use a skin-friendly change routine, to use adhesives and find the root cause of problem

- Use a skin-friendly change routine
- Use adhesives that recovers the skin
- Diagnose underlying causes and contributing factors as a way of trouble shooting to find root cause of skin irritation
- Utilise expertise of nursing colleagues: monitor and treat problematic cases, rule out infection and seek medical treatment as required

McNichol et al. 2013; Rippon, White & Davies, 2007; 3M, 2017

Advice patients to use a skin friendly hydrogel adhesive to recover the skin at night

Clinical study shows significant increase in mean days of skin improvement and hours of HME use when using Provox Luna during the night, an adhesive made from hydrogel.

Days skin improvement out of 28 days

Hours HME use out of 24 hours

Ratnayake et al. 2019
Advice patients to use skin friendly hydrocolloid adhesive during the day

Clinical study shows that less patients experience skin irritation with Provox OptiDerm, an adhesive made from hydrocolloid, compared to Provox FlexiDerm, an acrylic adhesive.

In a patient survey, 46% reported having sensitive skin. Only 10% used adhesive made from hydrocolloid, indicating need for improvements.
Atos Medical Series of Educational Events

This material is part of a series of Educational Events to present new research on post-laryngectomy issues. The series also include:

**Focus on pulmonary health**
Learn more about pulmonary issues in laryngectomized patients and how to manage these issues

**Focus on living an active life**
How does the laryngectomy impact patients’ activity level and social life? Learn more about the positive impact of being active

References: