

# LATEST DEVELOPMENTS IN THE GRADING OF PRESSURE ULCERS

It has long been recognised that pressure causes varying degrees of damage to the skin and underlying tissue. As such, experts have attempted to create tools that help to distinguish between these varying levels of damage. Since the National Institute for Health and Clinical Excellence (NICE) (2005) recommended the EPUAP/NPUAP system, it has been widely adopted in the UK. The recent safety thermometer activity (Department of Health [DH], 2012a) recommends the most recent EPUAP (2009) version of grading (DH, 2012b). Having one national tool makes sense, as it makes data collection, comparisons between healthcare settings and measuring within research more meaningful.

In 2009, the NPUAP and EPUAP came together to attempt to produce a universal tool for the grading of pressure ulcers. However, due to international differences with regard to reimbursement for healthcare costs, the two advisory panels produced slightly different tools — one for the US market, another for Europe. It appears, therefore, that grading is not straightforward and consensus is not easily achieved.

Compared with the EPUAP version, the NPUAP tool included two additional definitions:

- ▶ Suspected deep tissue injury, depth unknown
- ▶ Unstageable/unclassified — full thickness skin or tissue loss, depth unknown.

Donnelly (2005) discussed the difficulties of the inclusion of deep tissue injury in pressure ulcer grading, for example, not being able to visualise the wound bed. In her article, Donnelly discusses the potential for having only two grades of pressure ulcers, such as 'superficial' and 'deep'. In 2012, clinicians are no further forward with this concept. To have such a grading system would simplify the process for busy practitioners who have to diagnose pressure ulcers and attribute a grade.

This diagnosis is often based on limited knowledge/exposure in the area of deep tissue injury. The management of a grade

one or two pressure ulcer is the same, apart from the fact that a grade two may require dressings, so is it necessary to provide a grade, other than superficial pressure ulcer?

Likewise, for grades three and four, or unstageable pressure ulcers, this would include how to manage the wound based on individual assessment of the wound bed, whatever the grade. If the approach of 'superficial' and 'deep' grading was to be employed it may go some way towards solving how deep tissue injury/unstageable skin damage is classified.

## RECENT INITIATIVES

The DH, in 2010, began to pay serious attention to pressure ulcers within the patient safety directives (Stephen-Haynes, 2011). For 2012, the DH has set the target of eliminating pressure ulcers in 95% of patients (DH, 2012a). Some regional health authorities have stretched this ambition further to eliminate all avoidable grade two to four pressure ulcers by the end of 2012 (NHS Midlands and East, 2012).

Local commissioners in some areas, under the Commissioning for Quality and Innovation (CQUIN) initiative (DH, 2012a), have set targets for their reduction, with financial incentives attached. Tissue viability nurses (TVNs), while delighted that this level of interest in the prevention of pressure ulcers is finally being shown,

## Q&A

- ▶ *When is a pressure ulcer not a pressure ulcer?... When it's a moisture lesion (McDonagh 2008; Voegeli, 2011; Lloyd-Jones, 2012)*
- ▶ *When is a pressure ulcer not preventable?... When the skin, an organ, is failing. This often occurs at end of life or during serious systemic illness (Sibbald et al, 2009; Beldon, 2011)*
- ▶ *When is it difficult to determine the grade of a pressure ulcer?... When there's necrosis, slough or purple tissue damage*
- ▶ *Why can't we count prevalence and measure performance outcomes on that?... Because prevalence is not the same as incidence. Prevalence counts all pressure ulcers at one point in time, not just those that have developed within that episode of care*
- ▶ *How can patients be allowed to develop a grade three or four? Surely, the grade one or two damage is noticed first?... Pressure ulcers don't necessarily develop by working their way up through the levels of damage. The aetiology of a grade two may be different to that of a grade four.*

## FIONA DOWNIE

*Nurse Consultant Tissue Viability, Papworth Hospital NHS Foundation Trust, Cambridge; Senior Lecturer Tissue Viability, Anglia Ruskin University, Cambridge*

## HEIDI GUY

*Tissue Viability Clinical Nurse Specialist, East and North Herts NHS Trust Lister Hospital; Honorary Lecturer, University of Hertfordshire*



Figure 1: Blood-filled blister that is difficult to classify.

References

Beldon P (2011) Skin changes at life's end: SCALE ulcer or pressure ulcer? *Br J Comm Nurs* 16(10): 491–94

Bales I, Padwojski A (2011) Reaching for the moon: achieving zero pressure ulcer prevalence. *J Wound Care* 20(4): 374–77

CNO Bulletin (2012) News in Brief 23/05/2012. Available at: <http://cno.dh.gov.uk/2012/05/23/news-in-brief-5/> (accessed on 28 June, 2012)

Dealey C, Posnett J, Walker A (2012) The cost of pressure ulcers in the United Kingdom. *J Wound Care* 21(6): 261–66

Defloor T, Schoonhoven L, Fletcher J, Furtado K, Hayden H, et al (2005) Statement of the European Pressure Ulcer Advisory Panel — pressure ulcer classification differentiation between pressure ulcers and moisture lesions. *J Wound Ostomy Continence Nurs* 32 (5): 302–06

DH (2010) Defining Avoidable and Unavoidable Pressure Ulcers. Available at: <http://www.patientsafetyfirst.nhs.uk/ashx/Asset.ashx?path=/PressureUlcers/Defining%20avoidable%20and%20unavoidable%20pressure%20ulcers.pdf> (accessed on 28 June, 2012)

DH (2012a) Delivering the NHS Safety Thermometer CQUIN 2012/13: A Preliminary Guide to Delivering 'Harm Free' Care: Available at: <http://www.harmfreecare.org/measurement/nhs-safety-thermometer/accessed04/07/12> (accessed on 4 July, 2012)

DH (2012b) QIPP Workstreams: Safe care. Available at: [http://www.dh.gov.uk/en/Healthcare/Qualityandproductivity/QIPP-workstreams/DH\\_115447](http://www.dh.gov.uk/en/Healthcare/Qualityandproductivity/QIPP-workstreams/DH_115447) (accessed on 9 June, 2012)

have mobilised to ensure that the complex aetiology of pressure damage is understood by senior NHS personnel (Chief Nursing Officer [CNO], 2012).

TVN networks began communicating and realised they were all answering the same questions and facing the same challenges in the areas of grading, the reporting of pressure ulcers, for example. A meeting at the DH was held to discuss whether pressure ulcer incidence could be used as a nursing outcome indicator, i.e., when a pressure ulcer develops, it is a measure of poor nursing care. Once again, this puts the onus of preventing PUs entirely onto the nursing profession.

However, multidisciplinary involvement in preventing pressure ulcers has been proven to reduce incidence (Bales and Padwojski, 2011). The Tissue Viability Society (TVS) held a national consensus meeting, attended by the deputy chief nurse, in order to produce a consensus document (TVS, 2012), which it is hoped will help form DH policy with regard to the prevention of pressure ulcers and their measurement.

REPORTING OF PRESSURE ULCERS

The current situation means pressure ulcers in NHS Midlands and East are being reported in several ways:

- ▶ Monthly prevalence of old and newly acquired grade two to four pressure ulcers collected nationally (safety thermometer)
- ▶ All grade two to four pressure ulcers are reported
- ▶ Locally, all grade three and four pressure ulcers are reported as a serious incident with an associated root cause analysis
- ▶ The care quality commission and patient safety both have pressure ulcer incidents reported to them.

All this counting and reporting of pressure ulcer activity has meant that skin damage needs to be considered in a diagnostic manner. With financial incentives set against reductions in numbers, it is essential that the following are not reported as avoidable pressure ulcers:

- ▶ Unavoidable pressure ulcers – various definitions have been produced to help distinguish between avoidable and unavoidable (DH, 2010; NHS Midlands and East, 2012; TVS, 2012)
- ▶ Leg ulcers, diabetic foot ulcers,

- ▶ perianal abscesses, pilonidal sinuses
- ▶ Lesions on buttocks/sacrum that are not caused by pressure and were probably misdiagnosed as grade two PUs in the past, such as moisture lesions.

Therefore, in this time of increased spotlight on pressure ulcer development in healthcare, it is necessary that the reported grades are accurate. It is also time to look at superficial and deep grades, in order to make the process easier. Once reported, it can be cumbersome, in the present grading system, to down or upgrade the severity of an ulcer.

Classification within the current grading system

It has been shown that staff have difficulty determining the grade and cause of damage (Defloor et al, 2005). TVNs are the best-placed experts to distinguish between grades and causes of lesions thought to be pressure ulcers. However, assessing all suspected pressure ulcers will seriously affect the workload of any tissue viability team, assuming that an organisation actually has a TVN, while in the community setting this may be impossible to achieve, even with a TVN in post. Support will be needed to help ensure that the reporting is accurate.

If the damage presents as a purple/black injury or blood-filled blister with surrounding bruising it is difficult to classify until the progression of damage has been observed (Figure 1). In some instances, these go on to present as grade four once eschar has been debrided, but in others they may resolve without demonstrating any more than superficial dermal damage. Sometimes an open ulcer does not form at all. This fuels the need for a review of the present system, where downgrading is not acceptable.

It appears that there are two systems in place to address the difficulty in classification issue. One includes the 'unstageable' category, which could be particularly useful in today's reporting climate to prevent inaccurate penalties.

The TVS (2012) have recommended that the unstageable definition (NPUAP/EPUAP, 2009) is included in the grading system, but that more education is needed before the 'suspected deep tissue injury' category is included. It could be argued that unstageable covers both of these options. The issue remains that

if the unstageable category is included in a grading system, how do healthcare organisations investigate this category? For example, if it is deep tissue damage, does it go down the SI/RCA (serious incident with a root cause analysis) route? If it does not, there is potential that deep tissue damage is not recorded as such, and subsequent investigation for its root cause does not happen.

The second system is to classify the unstageable pressure ulcer as grade three until proven otherwise. This system has been adopted by NHS Midlands and East in their ambition to eliminate all avoidable grade two, three and four pressure ulcers by December 2012. This was adopted after it had been in use locally (in both the acute and community settings) for 18 months prior to the launch of the target. In this period of time, very few of these unstageable pressure ulcers were found to have superficial damage, while most were deep tissue damage.

This system gives the pressure ulcer a grade to guide the management, and subsequent investigation, of the root cause. With the increased surveillance of PUs at present, there is an opportunity to investigate and count how many unstageable pressure ulcers actually constitute deep tissue damage. However, both systems do require the training of staff in identifying such damage.

### When is damage not due to pressure?

Lesions on the buttocks/sacral area are quite frequently reported as pressure damage when they may actually be due to other causes. The commonest misdiagnosis is damage due to moisture or friction. Moisture damage can occur because of sweat, buttock shape and skin elasticity (Defloor et al, 2005). Sweaty skin that is deep in the natal cleft of large buttocks will rub and pinch while the patient is sitting/lying on 'plastic' covered surfaces, sliding off the bed, sliding down the chair, having hoist slings and sheets pulled beneath them, and finally, using a bedpan. The natal cleft can develop a linear lesion (Figure 2). Incontinence (faecal, urinary or both) can cause incontinence-associated dermatitis or moisture lesions.

TVNs now have to study these lesions closely and determine whether they could have been caused by pressure. The patient may well not care – they still have skin

damage that causes them distress, even if classified as superficial. However, it matters for the reporting of and the financial incentives in the CQUIN initiative. The position and shape of the damage, as well as clinical history, will help determine the underlying cause (Defloor et al, 2005).

Addressing this issue of pressure damage or otherwise to the skin requires training and knowledge for all practitioners working with patients vulnerable to skin breakdown. Defloor et al (2005) suggest an intelligent approach to making this diagnosis by taking into account the wound/lesion characteristics and patient-related characteristics, using a methodical approach.

The fact remains that this 'other' skin damage requires further investigation and the following questions are pertinent:

- ▶▶ If it is not due to pressure, is it not, therefore, preventable in the same way? How can this be done?
- ▶▶ How can the amount of sweat be reduced?
- ▶▶ The size and shape of the patient's bottom – how can this be managed?
- ▶▶ What protective barriers do we need to apply to the patient's skin to prevent this breakdown?

In reality, clinicians have not managed to eradicate nappy rash in infants. So can clinicians really hope to prevent this in adults? Locally, it has been found that most lesions in the sacral area are due to causes that are not related to pressure.

### CONCLUSION

In summary, there is a grading system currently in use in the UK. However, clinicians have work to do in the area of deep tissue injury/unstageable skin damage. The debate around adopting a grading system that only includes superficial and deep continues. These very important areas need to be investigated, debated and consensus reached.

Tissue viability organisations/networks and the DH need to work together in this important area. It is known that pressure ulcers impact on the patient physically, emotionally and socially (Gorecki et al, 2012). In addition, they place a large financial burden on the health and social care system in the UK (Dealey et al, 2012). Those in the speciality have a responsibility to address the issues in this important area around the grading of pressure ulcers. **WUK**



Figure 2: A natal cleft that has developed a linear lesion.

### References

- Donnelly J (2005) Should we include deep tissue injury in pressure ulcer staging systems? The NPUAP debate. *J Wound Care* 14 (5): 207–10
- EPUAP and NPUAP (2009) Treatment of pressure ulcers: Quick Reference Guide. NPUAP, Washington DC
- Gorecki C, Nixon J, Madill A, Firth J, Brown JM (2012) What influences the impact of pressure ulcers on health-related quality of life? A qualitative patient-focused exploration of contributory factors. *J Tissue Viability* 21: 3–12
- Lloyd-Jones M (2012) Prevention and treatment of superficial pressure damage. *Nurs Res Care* 14(1):14–20
- McDonagh P (2008) Moisture lesion or pressure ulcer – A review of the literature. *J Wound Care* 17(11): 461–66
- NHS Midlands and East (2012) Available at: [https://www.eoe.nhs.uk/page.php?page\\_id=2244](https://www.eoe.nhs.uk/page.php?page_id=2244) (accessed on 26 May, 2012)
- NICE (2005) Pressure ulcers: the management of pressure ulcers in primary and secondary care <http://publications.nice.org.uk/pressure-ulcers-cg29/guidance#ulcer-assessment> (accessed 28/06/2012)
- Sibbald RG, Krasner DL, Lutz JB, et al (2009) SCALE Skin changes at life's end. New York The SCALE expert panel.
- Stephen-Haynes J (2011) Pressure ulceration and the current government agenda in the UK *British Journal of Community Nursing* 16 (9): S18–26
- TVS (2012) Achieving consensus in pressure ulcer reporting *Tissue Viability Society* Available at: <http://www.tvs.org.uk/sitedocument/TVSConsensusPUReporting.pdf> (accessed on 26 May 2012)
- Voegeli D (2011) Pressure ulcer or moisture lesion – what's the difference? *Nurs Res Care* 13(5): 222–27