A CASE FOR USING EVIDENCE-BASED ASSESSMENT SCALES

By Kathleen M. Baldwin, RN, PhD, CNS, ANP

Fecal incontinence is often difficult to manage in patients in the intensive care unit. The authors of the preceding study, “Clinical Evaluation of a Flexible Fecal Incontinence Management System,” should be applauded for testing a promising new device to address this difficult problem. The study may have been further strengthened, however, with the addition of 2 evidence-based assessment scales: the Braden Scale for Predicting Pressure Ulcer Risk and the National Pressure Ulcer Advisory Panel’s (NPUAP’s) Staging System for Pressure Ulcers. Both tools have been tested repeatedly and have shown adequate validity and reliability.

The authors state that “[f]ecal incontinence is an established risk factor for pressure ulcers....” Of the 3 studies cited to support their assertion, one identified 21 additional pressure ulcer risk factors in the critically ill. Currently, fecal incontinence is considered one of many pressure ulcer risk factors, with the 2 major factors being pressure and shear forces. No established cause-effect relationship between fecal incontinence and pressure ulcer development has been reported in the literature. Therefore, assessing additional risk factors by adding an evidence-based pressure ulcer risk assessment scale, such as the Braden scale, may have provided a stronger link between fecal incontinence and pressure ulcer formation in the study subjects.

Methodological and ethical issues make evaluating the predictive validity of any pressure ulcer risk assessment scale difficult. National guidelines rank the level of evidence to support doing pressure ulcer risk assessments as “C,” the lowest level. But because withholding effective preventive measures from patients at risk for pressure ulcers in order to have a control group is unethical, raising the level of evidence supporting pressure ulcer risk assessment has been and will continue to be a difficult dilemma for researchers.

Nevertheless, the Braden scale is the most widely used pressure ulcer risk assessment scale in the United States. It has the highest degree of validity and reliability associated with any pressure ulcer risk assessment scale, although its predictive accuracy varies across populations. Because the average age of patients in this study was 60.7 years, however, the Braden scale would have been a good choice. In fact, the scale originally was developed and tested in the elderly and continues to show a high degree of sensitivity and specificity in that population. Use of the Braden scale also may have provided additional insight into why 2 patients in the study experienced generalized skin breakdown.

The authors used a nonvalidated, self-developed scale to rate skin condition in their patients. The study findings may have been more generalizable if the NPUAP staging system had been used. Although subjective assessment using the NPUAP staging system may vary, continued refinement of the system has helped to increase its interrater reliability. Comparison of the investigator-developed tool with the NPUAP staging system (the current

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gold standard) would have offered some degree of validity for the instrument used in the study.

In summary, the authors of this article provide evidence to support use of a promising new product to manage fecal incontinence—a serious problem that can affect length of stay and cost of care among patients in the intensive care unit. The study findings were limited, however, by the investigators’ use of an untested assessment scale rather than more accepted instruments such as the Braden scale and the NPUAP staging system. As mentioned, the current level of support for using both pressure ulcer risk assessment scales and fecal incontinence collection devices is C, which is admittedly the lowest level. However, building validity and reliability for established tools, in addition to testing new tools, can only help improve that rating and increase the evidence base for practice.

FINANCIAL DISCLOSURES
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REFERENCES

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