Instruction of Abdominal Assessment as it Relates to Convexity

Sarah Davis, RN, BSN, CETN
The Cleveland Clinic Foundation, Cleveland, Ohio

It was our intent to develop a teaching aid for the RNs enrolled in the Wound, Ostomy and Continence (WOC) Nursing Education Program at the Cleveland Clinic that would assist the RNs in assessing the need for convexity. It was determined that a poster would be useful as an instructional tool on abdominal assessment as it relates to convexity. A pictorial was developed which demonstrates the changes in the peristomal contour as the patient with a stoma stands, sits, and lies supine.

When teaching the principles of pouching to RNs enrolled in the WOC Education Program, assessment of the peristomal plane is included with the sizing of the stoma. Assessing the abdomen in supine, standing, and sitting positions shows the RNs the appearance of the stoma and abdomen during activities of daily living. Characteristics of abdominal support (firm, soft or flaccid) are considered in selection of a pouch face plate. When used correctly, convexity can prevent leakage and its associated problems, such as skin lesions, pain, and loss of confidence. Therefore, it is essential for the RNs in the WOC Education Program to learn to properly recommend convexity.

The technique pictured (Figures 1 - 6) is taught in our WOC Educational Program. Our WOC group assesses peristomal characteristics in various postures in the hospital and outpatient clinic. Students are expected to palpate peristomal skin and reposition patients. RNs enrolled in the program stated that this pictorial clarified which situations required convexity.

This poster aided beginner WOC nurses in determining the need for convexity in pouching systems. Correctly prescribing convexity helps patients with stomas with effective coping and rehabilitation.

As presented at the 31st Annual Wound, Ostomy and Continence Nurses Society Conference
June 20-24, 1999
Minneapolis, MN
Pictured is a 65-year old man with a diagnosis of a rectal tumor. He underwent a colo-anal anastomosis with a covering loop ileostomy. These pictures were taken on the fifth postoperative day.

**Figure 1:** Patient is supine. Loop ileostomy is located in the right lower quadrant. The locus of function is below the center of the stoma.

**Figure 2:** Patient is in the sitting position. Note the proximity of the stoma opening to the skin surface.

**Figure 3:** Patient remains seated. The WOC nurse is applying gentle pressure with her fingers. This approximates the effect of convexity. It is determined that convexity is appropriate because gentle pressure results in the ileostomy protruding. Effluent will remain in the pouch and not seep under the face plate.

**Figure 4:** Patient is standing. The abdomen is soft. No creases are noted.

**Figure 5:** Patient remains standing with the WOC nurse applying pressure. The physical assessment is the same as in Figure 3. Convexity is deemed to be beneficial.

**Figure 6:** The loop ileostomy is pouched with a FirstChoice™ Pouch with integrated convexity. Accessories used include Premium Paste and an appliance belt. Note that the ileostomy functions into the pouch, not under the barrier. A four day pouch seal was achieved.