

# Addressing the Tissue Tolerance and Postural Needs of an Active Hemipelvectomy Client

## Introduction

Clients who have the need for aggressive positioning are often at high risk for skin breakdown. This poses a challenge to the seating and wound care clinician.

The following case study involves the positioning and skin management of a high-risk spina bifida client with a hemipelvectomy.

## Background

Ms. B.K. is a 52-year-old female born with paraplegia secondary to spina bifida. She is alert and oriented and lives independently.

In 1972, Ms. B.K. suffered an ischemic ulcer (pressure ulcer) to her pelvis resulting in osteomyelitis and a left hemipelvectomy. Her skin is thin and her Braden risk assessment score is 16, indicating high risk for future skin breakdown. She frequently battles stage I ischemic ulcers (pressure ulcers).

Ms. B.K. has been on a ROHO® HIGH

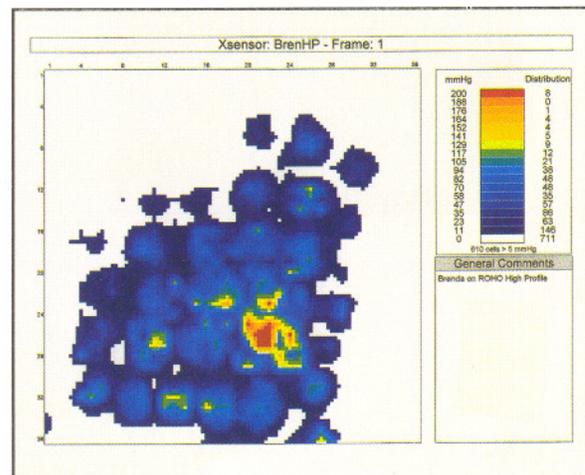


Figure 1. ROHO HIGH PROFILE cushion with client's handbag in place. (Evaluated using the Xsensor Pressure Mapping System).

PROFILE® cushion since her surgery in 1972. This has protected her vulnerable skin from full thickness wounds. However, in order to maintain an upright stable position, Ms. B.K. would place her handbag in back of her left hip in order to compensate for a left hip obliquity caused by her hemipelvectomy (Figs. 1 and 2). Her oblique left hip is fixed due to the long period of time she has spent in this position. She consequently exhibits a scoliotic spine.



Figure 2. Ms. B.K. sitting with obliquity using her handbag to level pelvis.

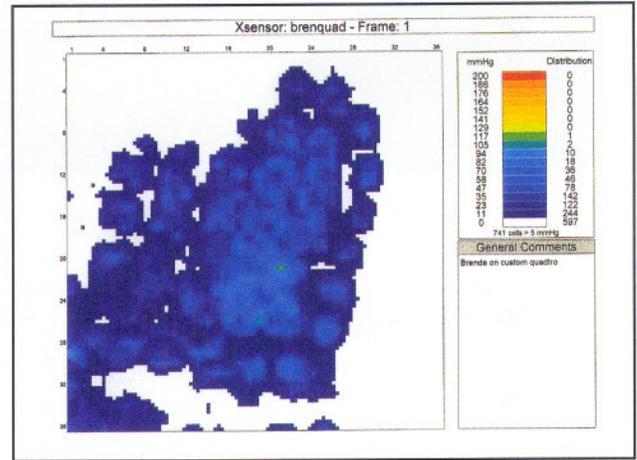


Figure 3. Ms. B.K. on the ROHO QUADTRO cushion. (Evaluated using the Xsensor Pressure Mapping System)

## Management of Care

Utilizing a multidisciplinary approach, the goals of this assessment were to prevent future skin breakdown, improve sitting posture progressively, and address the client's level of comfort.

In October 1997, Ms. B.K. was assessed by the E.T. nurse and the occupational therapist. The Xsensor™ Pressure Mapping System was used to determine product effectiveness in pressure distribution as well as areas of concern for future skin breakdown. The ROHO HIGH PROFILE provided therapeutic pressure distribution but more aggressive positioning was still required.



Figure 4. Ms. B.K. sitting comfortably and level on the ROHO QUADTRO cushion.



Figure 5. Ms. B.K. sitting comfortably and level on the ROHO QUADTRO cushion.

## Conclusion

After fitting Ms. B.K. with her new ROHO HIGH PROFILE QUADTRO® cushion, she was able to achieve proper positioning without the use of her handbag (Figs. 3 and 4). The ROHO QUADTRO cushion accommodates her fixed pelvic obliquity and provides her with the stability she needs for active life. Given Ms. B.K.'s hemipelvectomy, we were able to adjust the ISOFLAP VALVE® of the QUADTRO, locking the air into place and providing the customized seating environment required for her (Fig. 5). Ms. B.K.'s seated pressures are now more evenly distributed. All peak pressures are diminished, decreasing the risk for ischemia and possible tissue necrosis, as shown by the Xsensor Pressure Mapping System (Fig. 3).

When assessing a client who presents with both positioning and tissue management needs, we no longer have to sacrifice one goal for another. The ROHO QUADTRO cushion addresses both concerns.

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