Improving Patient Care by Managing Positional Pain During Interventional Computerized Tomography (CT) Procedures

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INTRODUCTION

As medicine advances in the new millennium, minimally invasive Interventional Radiology procedures are more frequently done as an alternative to traditional invasive therapies. Interventional procedures using CT guidance for biopsies and drainages are commonplace in most hospital settings today.

CT scanners are now faster than ever which has reduced diagnostic scanning time. The CT table is firm and narrow, with a concave surface designed for fast scanning, not for comfort. Patients requiring Interventional CT guided procedures typically endure a forty-five minute or longer table time, which is much longer than a diagnostic CT scan.

Patients undergoing Interventional CT guided procedures frequently complain about the hardness of the table and the discomfort they experience from their position during the procedure. These patients are often given moderate sedation to control procedural pain, but positional pain is not always alleviated.

A Standard of Patient Care for Radiology Nursing

Gel pads are designed to simulate human fatty tissue composition.
It reduces shear and friction that contributes to skin breakdown and positional discomfort.
Gel pads are: radiolucent, easy to clean, reusable, repairable, latex free, anti-microbial and anti-bacterial.
Gel pads and positioners are manufactured with a quarter inch continuous seal to the outer edge of the product: to eliminate the chance for contaminants to collect between the gel skin.
This gel pad was purchased from: Action Products, Inc. • 1-800-228-7763 • service@actionproducts.com

Poster printed by Medical Photography, Visual Presentation Technology Services, Christiana Care Health Services

REVIEW OF THE LITERATURE

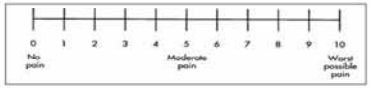
Literature reviewed indicates that gel overlay pads reduce pressure to immobile areas during surgery and procedures. By following best nursing practice and standards established by the US Association of Operating Room Registered Nurses (AORN), positional pain and potential tissue injury can be reduced.

Association of Operating Room Registered Nurses (AORN)
Perioperative Standards and Recommended Practices 2008
Recommendation VII
"The goal of using positioning equipment is to use equipment that is designed to redistribute pressure and that decreases the risk for positioning injuries."

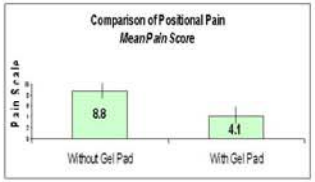
"Towels and sheet rolls do not reduce pressure and may contribute to friction injuries."

RESULTS

- 80 patients undergoing Interventional CT procedures were surveyed about their level of positional pain in regards to the CT table. Patients were specifically questioned about positional pain in addition to procedural pain.
- Surveyed patients remained on the CT table for at least forty-five minutes in various positions (supine, prone, lateral decubitus).
- A visual analog scale (0-10) was used to determine the level of positional pain.



- 40 patients without the gel pad had positional pain rating of 8 – 10.
- 40 patients with the gel pad had positional pain rating of 3 – 5.



CONCLUSION

With proper cushioning, positional pain can be managed during Interventional CT procedures with no recognizable impact on image quality. Gel pads support the patient evenly across the horizontal plane on which the patient is lying. By using a gel pad for Interventional CT table comfort, the patient who does not receive moderate sedation or who has positional pain will be better managed.

CLINICAL IMPLICATIONS

Positional pain is a common complaint of patients spending lengthy times on the Interventional CT table. Proper management of positional pain during Interventional CT procedures should be a standard of care for Radiology Nursing.

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