



Best Practices for Diagnostic Medical Sonographers: Understanding and Minimizing Risk of Musculoskeletal Injury

Overview

In 2002 a survey of BC Sonographers found that 91% had reported work related musculoskeletal injuries [MSIs] at some point. Medical literature suggests that 80% of sonographers seek medical treatment for MSIs, and many either miss work due to symptoms (17%), reduce their duties (15%) or use sick leave (21%) or vacation days (12%) to recover.

Questions were therefore raised such as:

- How can these injuries be prevented?
- What are the types of scans posing the highest risk of injury?
- What equipment seems to increase risk of pain and injury?

To find out the answers to these important questions, WorkSafeBC and the Health Sciences Association of BC jointly funded this project to identify and communicate a range of solutions for reducing musculoskeletal injury and disability among sonographers in B.C. This project brings together “best practices” and known solutions; including changes to equipment and supports, work techniques, how work is scheduled and organized, and increased overall awareness.

Ultrasound departments at St. Joseph’s Hospital in Comox and Nanaimo General Hospital participated in identifying the types of scans posing the highest risk of injury, as well as equipment and practices that increase the risk of pain and injury. They also participated in one-on-one training and trialed new equipment, supports,

and practices. With their feedback, and with technical input from “Sound Ergonomics” in Washington State, a series of one-page best practice sheets have been developed by Judy Village & Associates.

These best practice sheets may be accessed on-line, or they may be printed and posted in ultrasound departments. They may also form the basis for in-service training or refresher education within ultrasound departments. It is hoped that the seven sheets can be added to in future as new practices, techniques and equipment become available. Topics covered include:

- Understanding and Minimizing Risk of Musculoskeletal Injury
- Carotid Artery Scans
- Obstetrical Scans
- DVT Scans
- Gripping the Transducer
- Choosing a Good Scanning Table
- Adjusting your Workstation and Equipment

The partners in this initiative wish to acknowledge the vital service provided to the medical system by this dedicated group of health care professionals. This project represents the common interest of all stakeholders in working toward a safer work environment for them all. Thanks go as well to the BCIT Diagnostic Medical Sonography program, and the BC Ultrasonographers’ Society for their encouragement.

October 2011