

Musculoskeletal Discomfort in Radiologists

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Rationale

There has been increasing concern in recent years that in the PACS environment radiologists are spending more time sitting at their workstations engaged in repetitive tasks (e.g., scrolling through images), and this can lead to musculoskeletal (MSK) injuries, fatigue and poor health outcomes. The goal of this study was to assess the prevalence of musculoskeletal discomfort, its intensity and the degree to which it interferes with their work using a validated survey tool.

Methods

In this IRB approved study, the Cornell Musculoskeletal Discomfort Questionnaire was distributed electronically to all members (faculty, fellows, residents) of our large radiology department. Additional demographic questions were included. Responses were anonymous unless they opted to receive a \$5 gift card.

Results

There was a 33% response rate (n = 99), 39% female and average age of 36.94 (range 26-61). 80% reported spending more than 7 hours/day at their workstation with 52% spending 100% of the time seated. Females were significantly more likely to report discomfort in the right shoulder, left shoulder, and left forearm; those spending > 7 hours in the right shoulder; board certified > 10 years in left upper and forearm; and those > 90% seated in left shoulder and upper back. In terms of degree of discomfort (slightly, moderately, very uncomfortable), females were significantly more likely than males to report neck, lower back and hip/buttocks pain as moderate/very uncomfortable. With respect to discomfort interfering with work, 53% of those with neck, 41% with low back, and 40% with upper back pain said it at least slightly interfered with work. 11% with right wrist pain said it interfered substantially. Those board certified more than 10 years were more likely to report neck pain as interfering as were older radiologists.

Conclusions

Results confirmed previously published findings of MSK pain among radiologists, and added new insight symptom frequency and impact on work. Statistically significant demographic factors included gender, age, years in practice, time spent seated and hours at the workstation. These differences may be due to furniture design that favors a male body habitus or differences in position and posture between genders. Based on these results recommendations regarding improved workplace design can be implemented.