

Texting.... A Pain in the Neck? A Pilot Study of Neck Angle when Texting

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Introduction

- ❖ Mobile phones are becoming increasingly popular and individuals appear to be spending longer durations using them for text messaging; it has been suggested that this action may lead to musculoskeletal disorders (Gold et al, 2011). It is hypothesised that this may be partly attributed to an increase in neck angle (a forward head posture), but there seems to be no research to date investigating the effect of texting on neck angle. However, increased neck flexion is associated with spinal pathologies (Ariens et al, 2001). The CSP (2013) acknowledges physiotherapists play a key role in addressing public health issues, by raising awareness of the association between a musculoskeletal disorder and contributory factors.

Aim

- ❖ This study aims to determine neck angle when comparing a standardised upright standing posture with a standing text posture.

Method

- ❖ Convenience sample of healthy subjects (n=17).
- ❖ A same subject cross over design with wash out period.
- ❖ Standardised instructions including the use of the same footwear
- ❖ Neck angle was defined as the angle between a line joining C7 and the tragus, and a vertical reference line from C7 (Sommerich et al, 2001). See figure 1.
- ❖ The two conditions were a self-selected standing posture whilst texting (Fig. 2) and a standardised upright comfortable (non-texting) standing posture (Fig. 3) as defined by Silva et al (2011)
- ❖ Photogrammetry (Matlab) was used to measure neck angle.
- ❖ Wilcoxon signed rank test was used for statistical analysis.

Results

- ❖ Mean neck angle for the texting posture was 60.61° (S.D.± 4.72), and for the standardised posture was 40.49° (S.D.± 9.19).
- ❖ The mean difference in angles was 20.12° (p=0.000).

Conclusion

- ❖ Neck angle is significantly greater (clinically and statistically) in a texting position.
- ❖ A standing texting posture seems to cause a relatively large neck angle so physiotherapists need to be mindful of this in their roles of both helping to prevent and treating musculoskeletal disorders.

References

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Fig 1: Markers to determine neck angle

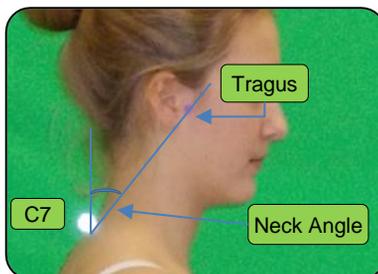


Fig 2: Texting Posture



Fig 3: Standardised Posture



Acknowledgement: The expertise of Professor Robert van Deursen in writing the programme for analysis of neck angle by Matlab is appreciated.