

The Effects of a Single Game of Ice Hockey on Cervical Range of Motion

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Unavoidable Damage from ADL's?



Fastest Sport on Earth



- Speeds 30 mph reached on the ice
- Collisions ... fighting.... body checking
- WAD < 15mph

<http://www.youtube.com/watch?v=qak5o6j42zc>



Cervical Range of Motion device (CRoM)

- CRoM measures in many fields – Normal, whiplash, sports

– (Demaille 2007; Lark & McCarthy, 2007, 2009, 2010;)

- Highly validated

– (Florêncio et al.2010; Tousignant et al. 2002; Youdas et al. 1991)

- Easily repeatable
- Cheap

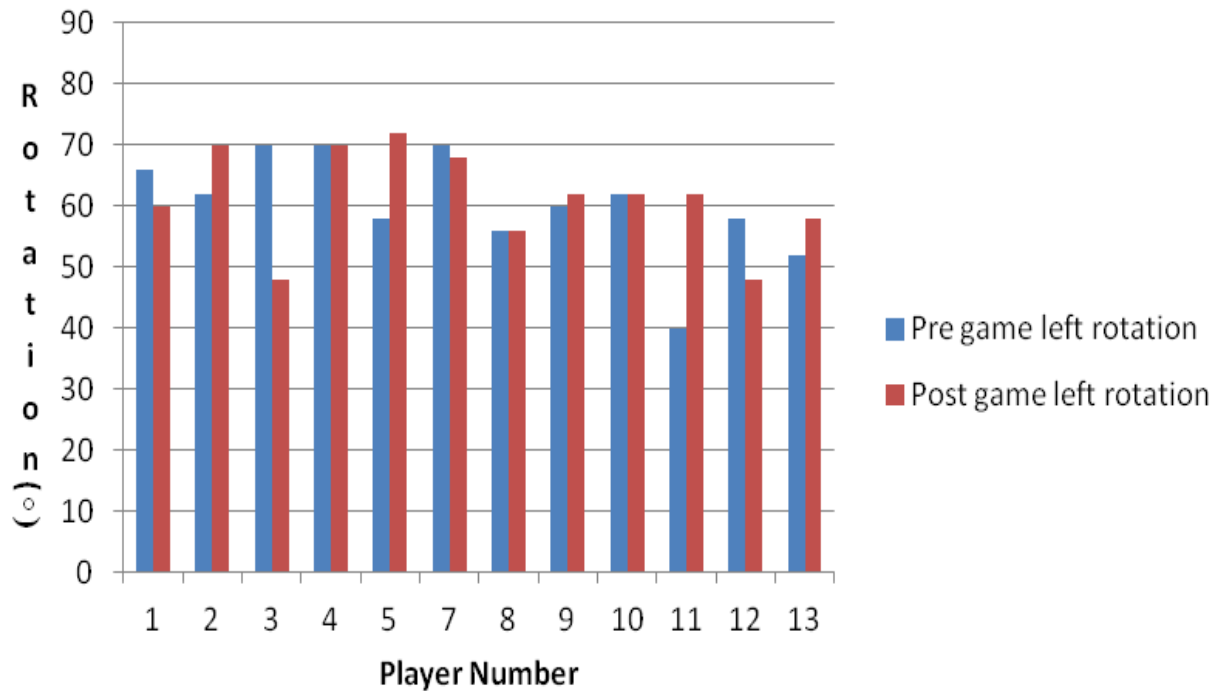


- Injury to the neck may result in a measurable change in ACROM (Dall’Alba et al 2001)



Results

Left Cervical Rotation Pre vs Post Game



Results

	Study groups	Mean age (Years \pm 1SD) – sex (range Years)	Left rotation (mean \pm 1SD)	Right Rotation (mean \pm 1SD)
Current study	Ice Hockey	25 \pm 4 – M	60 \pm 8	60 \pm 12
(Lark & McCarthy, 2007)	Rugby forwards	26 \pm 5 – M	65 \pm 7	63 \pm 9
	Rugby backs	24 \pm 5 – M	71 \pm 8	67 \pm 7
	Controls	28 \pm 7 – M	76 \pm 7	71 \pm 10
(Demaille et al. 2007)	Normals	15 – 25 – M	75 \pm 9	75 \pm 12
	Normals	25 - 35 – M	76 \pm 12	81 \pm 11
(Dell’Alba et al. 2001)	Asymptomatic	39 \pm 14 - M/F	68 \pm 9	67 \pm 9
	WAD	37 \pm 12 - M/F	54 \pm 14	53 \pm 13
(Youdas et al. 1992)	Normals	20 – 29 - M/F	69 \pm 7	70 \pm 6

Conclusion

- A single game of ice hockey does not have a statistically sig. affect upon ice hockey players ACROM.
- Due to an reduced initial ACROM?
- Speculation (reduced ACROM) is due to the repetitive trauma to the cervical spine incurred during previous games.

Questions???????