

Profile – Shari Wynd, MASc, DC



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Dr. Shari Wynd recently did a podium presentation entitled “Vertebral artery dissections: can cervical manipulation cause these injuries?”. The abstract, co-authored by Dr. T. Anderson, Dr. J. Tyberg, and Dr. G. Kawchuk, was selected for a podium presentation at the 6th Alberta Biomedical Engineering conference in Banff. There were a

total of 36 presentations, with prizes to be awarded to the top three presenters. Some of the judges of these presentations included the invited lecturers: Dr. Amyl Ghanem (Dalhousie), Dr. John Linehan (Stanford University), and Dr. Ted Gross (University of Washington). Dr. Wynd’s presentation was the third prize winner.

Congratulations Dr. Wynd!

Presentation Summary:

“Vertebral artery dissections (VADs) have been implicated as a cause of stroke following cervical spine manipulation therapy (cSMT). While these injuries are rare, any profession using cSMT as a treatment modality has a responsibility to identify the causes of such injuries. While some researchers hypothesize that VADs can be created de novo by cSMT, my hypothesis is that cSMT may exacerbate a pre-existing lesion.

The talk that I will present today will demonstrate some of my preliminary work that is required before I can address this hypothesis. I will present three technical issues regarding my planned experimental protocol, and discuss how their resolution will lead to my ability to address my hypothesis. These issues are: 1) efficiently creating a VAD in a canine model 2) addressing whether cSMT can be used with this animal model, and 3) what outcome measures will be used to quantify injury magnitude.

VAD’s were efficiently created using an angioplastic cutting balloon. These injuries could then be visualized using both fluoroscopy and intravascular ultrasound. Measurements of the injury length and volume could be obtained using these imaging techniques before and after cSMT. With a protocol now in place, and the technical issues addressed, I will be able to move forward and begin assessing how cSMT effects a pre-existing VAD in a canine model.”