

Obstacles and Success of Performing OMT in Rural Ecuador

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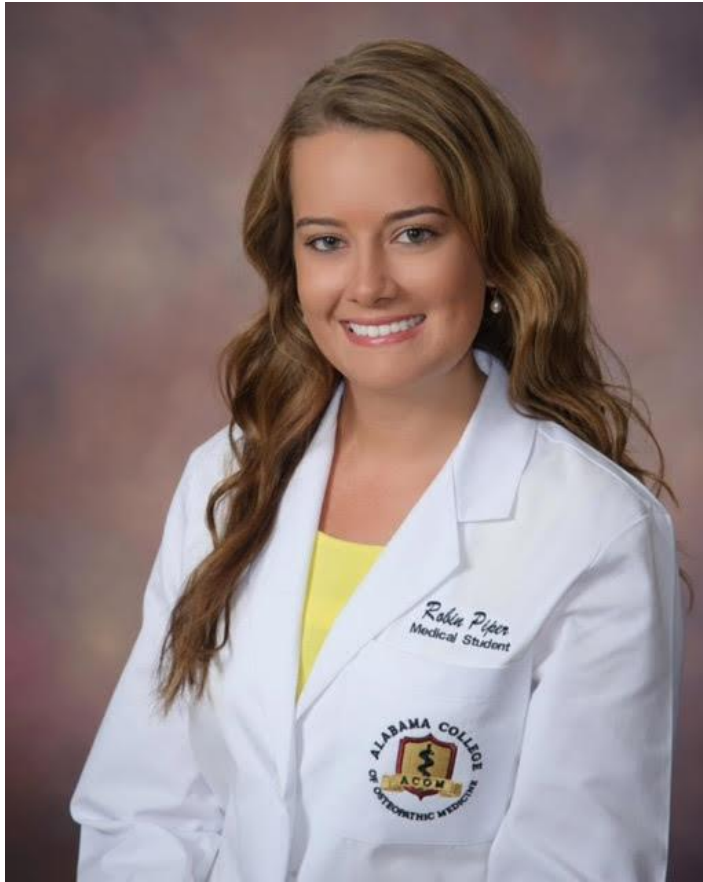
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The Alabama College



of Osteopathic Medicine

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Background

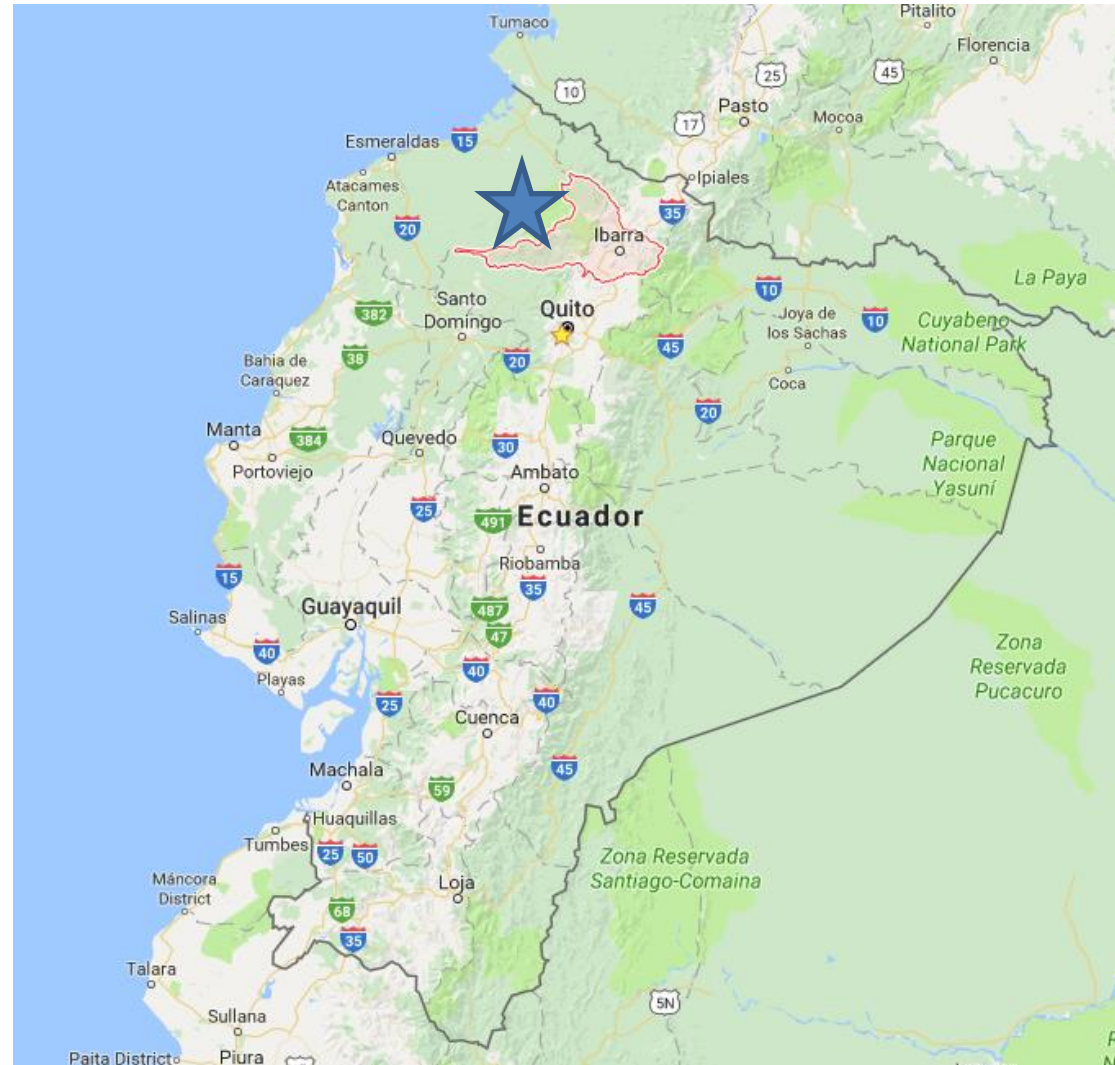
- 11 incoming OMS-II students from ACOM
- Dr. Kevin Hayes, Chair of Osteopathic Practice & Principles
- Dr. Mark Hernandez, PhD of Pharmacology
- July 2nd – 10th, 2016
- Quito, Ecuador to northern providence of Imbabura
- Local physician Dr. Juan Felipe Alarcón of ANAMER



Source: <http://www.lahistoriaconmapas.com>



3 regions visited:
Peñaherrera
Valle del Chota
Otavalo



Source: Google maps.



Trip Objectives

- To expose students to healthcare in a developing nation alongside cultural immersion
- To utilize skills developed in the first year of osteopathic medical education to assist with acquisition of history, physical examination and development of treatment plan
- To practice and educate people on the practice and principles of Osteopathic Manipulative Medicine

Terms

- Somatic Dysfunction (SD)
- Osteopathic Manipulative Medicine (OMM)
- Osteopathic Manipulative Treatment (OMT)
- Counterstrain (CS)
 - Utilized in this study on the shoulder girdle
- Ligamentous-Articular Strain (LAS)
 - Utilized in this study on the knee

Methods

- Students performed osteopathic screening examinations on patients with MSK pain complaints
 - Somatic dysfunction was diagnosed when indicated
 - Common mnemonic TART aids diagnosis

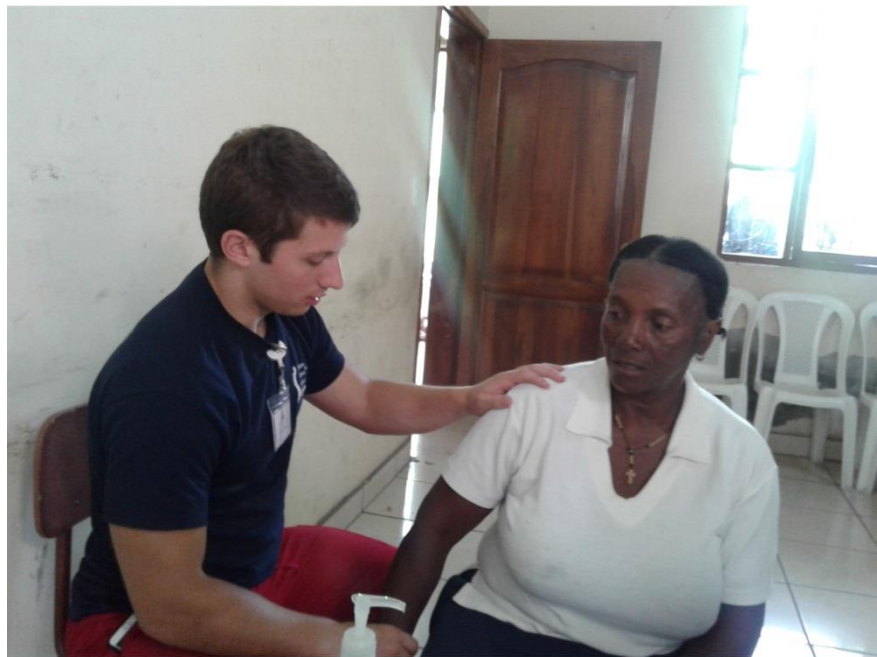
T	Tissue texture changes (boggy, ropy, hypertonic)
A	Asymmetry
R	Restriction of motion (decreased ROM)
T	Tenderness (pain, discomfort)

Methods

- After diagnosis of SD was made, OMT was performed under the supervision of Dr. Hayes
- Patients were reassessed for range of motion (ROM) and pain level after treatment
- Treatment was considered to have a positive outcome if:
 - Patient expressed pain relief
 - Practitioner felt tissue release and/or noted improved ROM or joint positioning

Counterstrain (CS)

- Indirect method that utilizes body positioning to halt inappropriate nociceptive activity
 - Move the somatic dysfunction away from the restrictive barrier
 - Shortens the affected muscle allowing for neurological de-facilitation
- Position held for ≥ 90 seconds or until tissue texture change, patient then returned to neutral and is reassessed



Muscles treated most often:
Supraspinatous, infraspinatous,
teres minor

Ligamentous-Articular Strain (LAS)

- Used as a direct method to rectify abnormal tension of opposing ligaments
- Motion test to diagnose preferred positioning of the joint complex
 - Challenge the bony segment to approach its restrictive barrier
 - Hold until release of tissue is felt
- Patient is returned to neutral and is reassessed

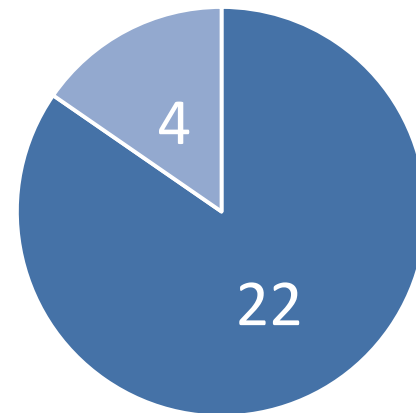


AKA the “Million Dollar Knee Technique”

Results: Shoulder CS

- 26 patients were treated with CS of the shoulder girdle muscles
- 22 had positive outcome as previously defined
 - **85% success rate**

CS of the Shoulder

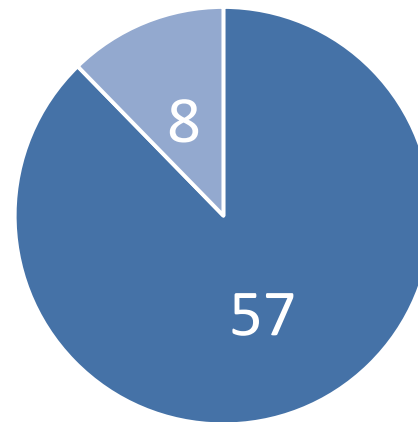


■ Improvement ■ No Improvement

Results: Knee LAS

- 65 patients were treated with LAS of the knee
- 57 had positive result
 - **88% success rate**

LAS of the Knee



■ Improvement ■ No Improvement

Discussion

- Many factors contributing to SD in these rural populations:
 - Manual labor (agriculture, livestock industries)
 - Rough terrain and elevation
 - Poor sanitation
 - Nutritional deficiencies
 - Barriers to receiving medical treatment
 - Inadequacies of the healthcare system
 - Lack of care in some remote rural settings

Discussion

- Many obstacles to OMT including:
 - Lack of proper exam tables
 - Improvisation!
 - Language barrier difficulties given distinctive dialects of the 3 populations visited
 - Inability for patient follow up
- Despite obstacles, success was achieved with lasting effect in many patient cases

Conclusion

- ACOM students and faculty successfully endeavored on this outreach mission and treated 234 patients over a 3 day period
- Students were able to utilize OMT under supervision with measured success
- Patients were very receptive to OMT and eager for healing
 - Exemplifies core ideals of the osteopathic profession
- Lessons learned for future missions will be carried forward

Call To Action:

Why Perform OMT Abroad

- OMT can be used as a “free” procedure only requiring the skilled hands of an osteopath, in any setting
- All people are eager to be touched and have their pain addressed
- When used responsibly and conservatively, can greatly improve lifestyle of low or no income patients
- *We need to continue compiling data on its efficacy abroad*

Acknowledgements

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Questions?
Thank You!

