Hippotherapy for Children With Spina-bifida

By: Michael Fauser & Kalie Reams

What is Spina-bifida?
Spina-bifida is a congenital disorder affecting the development of the spinal cord. There are several types of spina-bifida with different degrees of severity and impairments. Common impairments include paralysis of hip extensors and abductors, flail knee and foot contractures and loss of sensation.

Typical Treatment
- Balance training
- Gait training
- Strengthening of weak muscles
- Stretching

Benefits of Typical Physical Therapy
- Translates better to real life situations
- Covered by insurance
- Standard course of treatment

Drawbacks of Physical Therapy
- Difficult to facilitate normal pelvic rhythm
- Resistance to ground reaction forces and gravity

What is Hippotherapy?
Hippotherapy uses the natural motion of a horse to stimulate the pelvic rhythms of the rider in a way that is similar to walking. This treatment is useful for many different diagnoses but primarily those with neurologic impairments.

Benefits of Hippotherapy
- 3 dimensional rhythmic motion
- Sinusoidal pattern
- Soothing
- Social interaction
- Multi aspect treatment
- Improved pelvic alignment

Drawbacks of Hippotherapy
- Patient must be able to be on a horse safely
- Added cost
- May not be for everyone
- Would not be suitable for all patients with spina-bifida

Question:
Could a child with moderate deficits in balance and gait as a result of spina-bifida benefit more from hippotherapy in combination with traditional physical therapy than just physical therapy alone.

Conclusion
Hippotherapy in conjunction with traditional PT can help improve pelvic position and rhythm during gait.

References