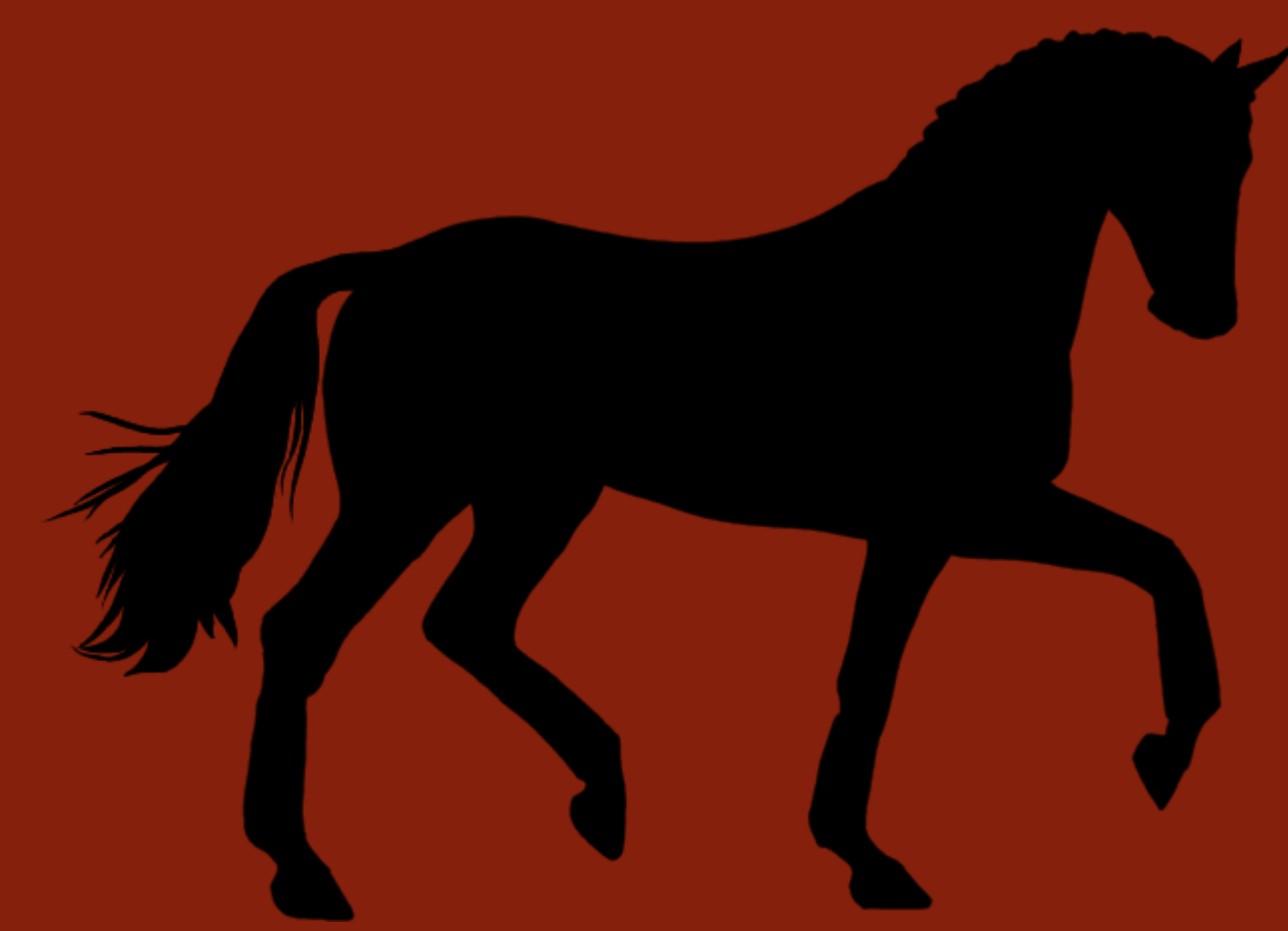


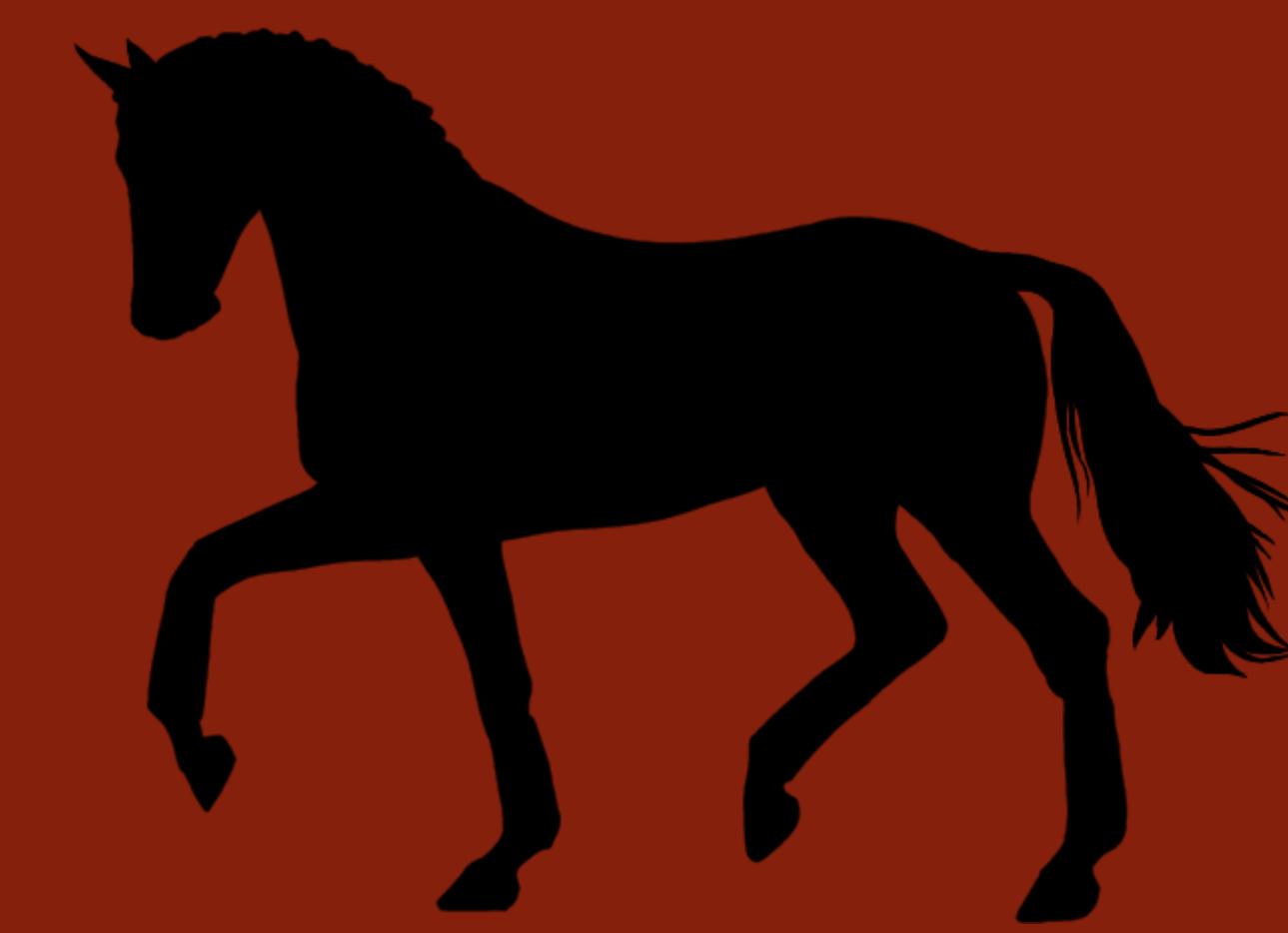
The Effects of Hippotherapy on Children with Cerebral Palsy: A Systematic Review

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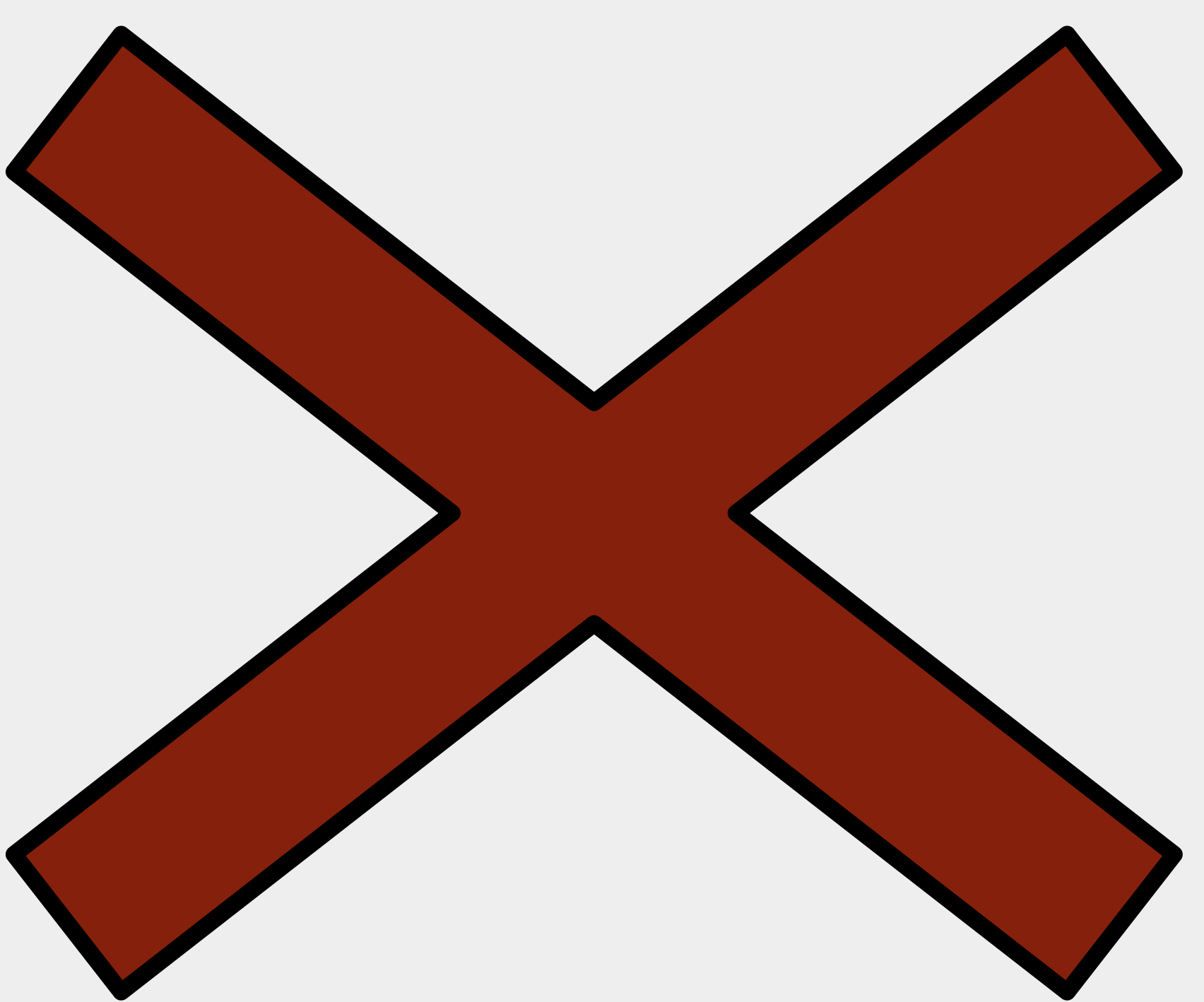
Hippotherapy is an effective intervention to improve postural control in children with Cerebral Palsy.

Hippotherapy is best utilized when performed in conjunction with conventional therapies.



Background:

- Cerebral Palsy (CP) describes a group of disorders that develop from non-progressive damage that occurred in the fetal or infant brain.^{1,2}
- Children with CP have significant activity limitations and participation restrictions due to deficits in postural control.^{1,3-5}
- A horse's gait provides a smooth, rhythmic, and repetitive pattern of movement that stimulates a patient's postural reflex mechanism.⁶⁻⁷
- Hippotherapy is performed by a licensed PT, OT, or SLP.⁷⁻⁸
- Mechanical riding simulators provide similar physical effects to hippotherapy with a live horse.⁹

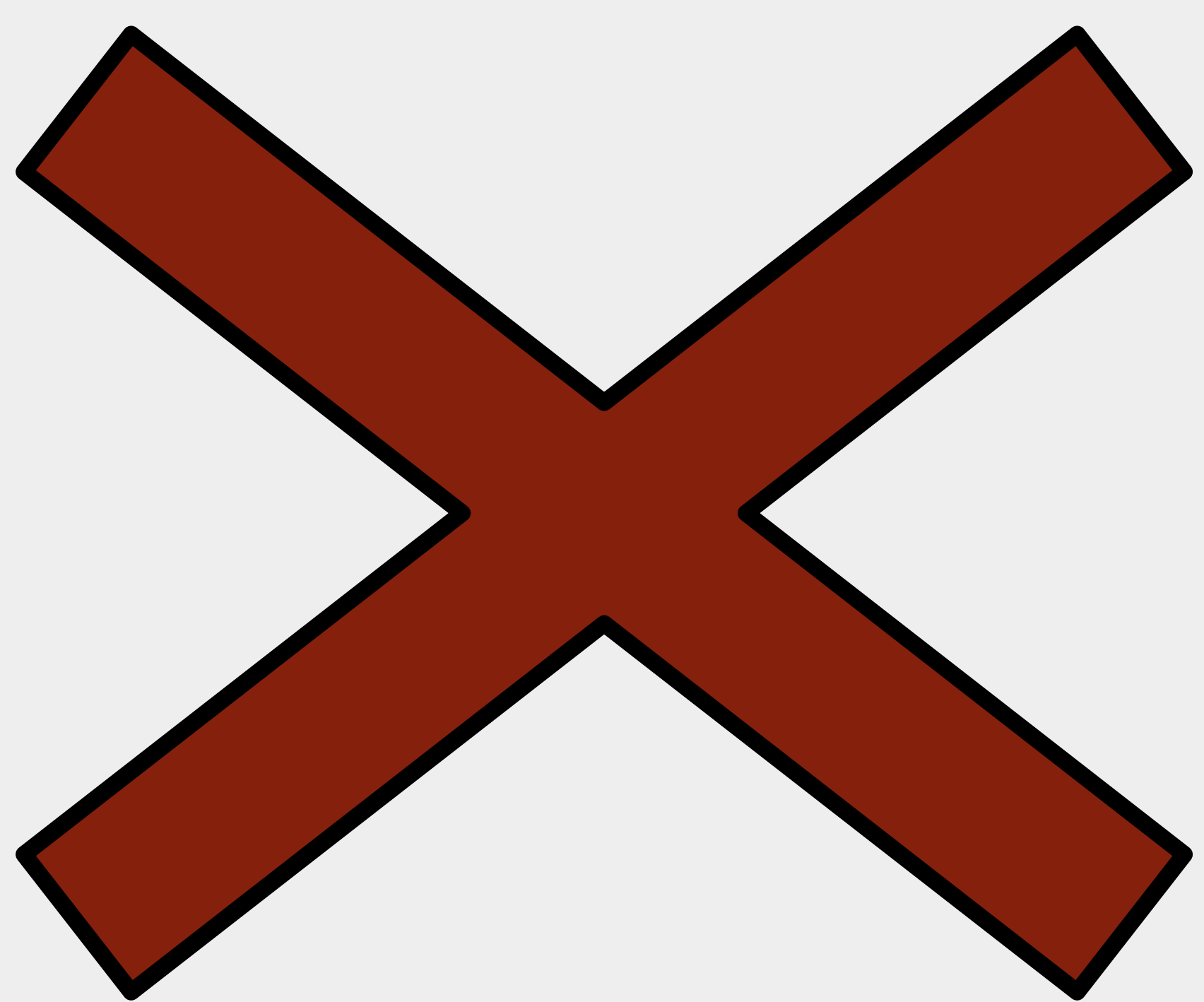


Methods:

- Academic Search Ultimate, PubMed, ScienceDirect
- Searches performed in August 2020 & January 2021
- 13 articles were included in this systematic review

Summary of Evidence:

- Average PEDro score: 6.07
- Significant improvements were observed in:
 - Gross motor outcome measure scores¹⁰⁻¹⁴
 - Overall balance and postural stability^{11-13,15}
 - Muscle tone and activation of hip and core musculature^{13,16-20}
 - Trunk control in static and dynamic environments^{10,18,21}
 - Joint angles and range of motion^{11,17,22}



Discussion:

- The inclusion of mechanical riding simulators allows hippotherapy to be more accessible.
- Therapists should be familiar with the diagnoses that are good candidates for hippotherapy and what the benefits of hippotherapy are.
- Learning where the nearest therapist is that offers hippotherapy is a great way to promote the intervention.
- Future research should be performed to examine the effectiveness of hippotherapy on other areas of motor function in children with CP and other developmental disorders.

