

Influence of cranial-sacral osteopathic treatment on the performance of young soccer players

Submission date 25/01/2015	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 06/02/2015	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 05/02/2015	Condition category Musculoskeletal Diseases	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

CSOT is thought to be a complementary approach for the prevention and treatment of dysfunctions and enhancement of health in osteopathy. In sports medicine, cranial sacral treatments have been proposed for the prevention, restoration and optimization of the function of the body. Players' health condition affects every aspect of their performance ability. According to osteopathic philosophy, structure and function are inter-related and by improving the structure, the function should improve, osteopathic treatments might be a valuable tool to optimise physical performance. The aim in this study is to investigate the effects of CSOT on performance and recovery of young soccer players.

Who can participate?

Healthy boys who play soccer

What does the study involve?

Participants will be randomly allocated to one of two groups. Group 1 (n=20) will be treated with osteopathic cranial-sacral diversified techniques and group 2 will receive a sham intervention for 8 weeks. The effects after CSOT will be compared with those of the sham intervention.

What are the possible benefits and risks of participating?

A benefit might be that participants notice some improvements in their performance. The risks might be physical injury and cardiovascular risks.

Where is the study run from?

Junior Team Futebol Club (Brazil)

When is the study starting and how long is it expected to run for?

From February 2015 to April 2014

Who is funding the study?

British School of Osteopathy (UK)

Who is the main contact?
Ms Patricia Miyuki Hirai

Contact information

Type(s)
Scientific

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Study information

Scientific Title
Influence of cranial-sacral osteopathic treatment on the performance of young soccer players: a single-blind randomised controlled study

Study objectives

1. Cranial-sacral osteopathic treatments (CSOTs) can be a valuable tool to enhance training recovery, assessed by the repeated sprint ability test (RSAT), heart rate variability (HRV), heart rate and perceived recovery wellbeing, in young soccer players
2. CSOTs can positively influence performance in young soccer players

Ethics approval required
Old ethics approval format

Ethics approval(s)
British School of Osteopathy Research Ethics committee, 18/06/2014

Primary study design
Interventional

Study design
Single-blind randomised controlled study

Study type(s)
Treatment

Health condition(s) or problem(s) studied

Training performance of young soccer player

Interventions

Soccer players will be randomly assigned to one of two treatments for 8 weeks:

1. CSOT: motion analysis of cranial-sacral movements with patient lying supine; areas of dysfunctional motion will receive specific treatment consisting of occipital-sacral rhythm, sphenobasilar and compression of the fourth ventricle techniques applied according to the findings.
2. Sham intervention: standardised light manual contact on the same anatomical regions as the CSOT group, without therapeutic intention; seven serial calculations will be subtracted in silence

Intervention Type

Procedure/Surgery

Primary outcome(s)

1. Physical performance (RSAT – RSAT_{best} and RSAT_{mean}) in the the first, fourth and eighth weeks
2. Perceived recovery wellbeing (training wellbeing diary, adapted from Bompá and Haff, 2009) before every intervention
3. Adaptation aspects (HRV before and after each CSOT and sham procedure)
4. Mean heart rate during the last 30 seconds of exercise

Key secondary outcome(s)

Verify whether osteopathy is a valuable adjuvant tool to enhance performance in young soccer players

Completion date

25/04/2015

Eligibility

Key inclusion criteria

1. Physically and mentally healthy athletes without any symptoms of neuromusculoskeletal pain, injury or illness
2. Soccer players
3. Age 16–18 years
4. Legal guardians' consent for participation in the study
5. Regular attendance at training sessions and competitive matches for 5 days a week for at least 5 years
6. Defenders (central and external/full-backs and wing-defenders), midfielders (central and wide) and attackers (forwards)
7. Naïve to cranial-sacral osteopathic care
8. Possessing no previous knowledge and experience of cranial-sacral osteopathic procedures
9. No change of medical or physical routine because of the addition of the new procedures

Participant type(s)

Healthy volunteer

Healthy volunteers allowed

No

Age group

Mixed

Sex

Male

Key exclusion criteria

1. Acute fracture or infections
2. Cancer
3. Signs of progressive neurological deficit
4. Professional soccer athletes
5. Goalkeepers (since technical skills differ significantly from outfield players and have a specific physiological and biomechanical profile [Eirale et al, 2014])
6. Current illness
7. Suspicion of increased intracranial pressure
8. Cardiac disease
9. Pulmonary diseases
10. Injuries
11. Signs or symptoms of pain or illnesses such as inflammation

Date of first enrolment

11/02/2015

Date of final enrolment

11/02/2015

Locations**Countries of recruitment**

Brazil

Study participating centre**Junior Team Futebol Club**

Londrina

Brazil

Sponsor information**Organisation**

British School of Osteopathy

ROR

<https://ror.org/05tnja216>

Funder(s)

Funder type

University/education

Funder Name

British School of Osteopathy

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration