Predicting growth and curve progression in the individual patient with adolescent idiopathic scoliosis.

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON25520

Source NTR

Health condition

Adolescent idiopathic scoliosis

Sponsors and support

Primary sponsor: Prof. Dr A.G.Veldhuizen, Orthopaedic surgeon, University Medical Center Groningen, The Netherlands. Hanzeplein 1, 9713 GZ Groningen. Email: a.g.veldhuizen@orth.umcg.nl Tel: 050-3612802
Source(s) of monetary or material Support: fund = initiator = sponsor

Intervention

Outcome measures

Primary outcome

An algorithm for determination of the timing and magnitude of the peak growth velocity in the individual patient with adolescent idiopathic scoliosis.

Secondary outcome

The relationship of several growth parameters to the peak growth velocity of height and the progression of the idiopathic scoliosis.

Study description

Background summary

The goal of this study is to develop an algorithm for predicting the timing and magnitude of the peak growth velocity in the individual patient with adolescent idiopathic scoliosis. The predictive value is determined of several maturity indicators that reflect growth or remaining growth potential. examples are different length measurements, secondary sexual characteristics, skeletal age in different areas, and EMG measurements of the paraspinal muscles. Furthermore, these parameters are evaluated for their correlation with curve progression in the individual scoliosis patient.

Study objective

Goal is to develop an algorithm for determination of the timing and magnitude of the peak growth velocity in the individual patient with adolescent idiopathic scoliosis.

Study design

All the growth parameters are measured every 6 months at regular follow up of the idiopathic scoliosis.

Intervention

This study is primarily observational. Several growth parameters are measured and observed in order to determine the relationship with the peak growth velocity and the scoliosis progression.

Parameters are: Measurement of height, sitting height, leg length, lateral armspan, foot length, shoe size, weight. Determination of secondary sexual characteristics. Measurement of EMG ratios of the paraspinal muscles. Determination of skeletal age in the hand, elbow, and pelvis. Status of the triradiate cartilage, Risser sign. Follow up of the Cobbe angle, the rotations in the spine, and the length of teh scoliotic spine.

Contacts

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Eligibility criteria

Inclusion criteria

All patients between 8 and 18 years, with adolescent idiopathic scoliosis (Cobb angle >10o) visiting the outpatient clinic of the UMCG.

Exclusion criteria

- 1. Previous spinal operation;
- 2. Skeletal dysplasia;
- 3. Abnormalities of maturation or height that would influence height measurements.

Study design

Design

Study type: Intervention model: Observational non invasive

Other

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Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	11-11-2009
Enrollment:	40
Туре:	Anticipated

Ethics review

Not applicable	
Application type:	Not applicable

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL1931
NTR-old	NTR2048
Other	STW : 0716
ISRCTN	ISRCTN wordt niet meer aangevraagd.

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Study results

Summary results

Predicting growth and curve progression in the individual patient with adolescent idiopathic scoliosis: design of a prospective longitudinal cohort study. Submitted to BMC Musculoskeletal disease October 2009.