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

Gepubliceerd: 08-10-2009 Laatst bijgewerkt: 18-08-2022

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.

Ethische beoordeling	Niet van toepassing
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON25520

Bron
NTR

Aandoening

Adolescent idiopathic scoliosis

Ondersteuning

Primaire 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
Overige ondersteuning: fund = initiator = sponsor

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

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

Toelichting onderzoek

Achtergrond van het onderzoek

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.

Doel van het onderzoek

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.

Onderzoeksopzet

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

Onderzoeksproduct en/of interventie

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.

Contactpersonen

Publiek

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

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

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Previous spinal operation;

2. Skeletal dysplasia;

3. Abnormalities of maturation or height that would influence height measurements.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd

Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	11-11-2009
Aantal proefpersonen:	40
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing

Soort:	Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

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

Resultaten

Samenvatting resultaten

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.