



Subject: **Request for assistance with recruitment of adolescents with idiopathic scoliosis in a randomized controlled trial using the Schroth exercises**

Dear Dr. \_\_\_\_\_,

We are contacting you to inform you that a multicenter randomized controlled study to determine the effect of the **Schroth exercises** on Cobb angle, vertebral rotation, back muscle endurance and quality of life in **adolescent idiopathic scoliosis** is being conducted at the University of Alberta at the Faculty of Rehabilitation Medicine in collaboration with the University of Alberta and the Stollery Children's Hospital. Other centers include the Alberta Children Hospital in Calgary and the Hôpital Ste-Justine in Montréal. The study also aims to understand which patients are likely to benefit from this treatment.

Schroth exercises are scoliosis-specific exercises that aim to correct posture and prevent curve progression. They are performed in lying, sitting or standing positions using props. A certified Schroth instructor teaches Schroth exercises individually and in group sessions. The results from several cohort studies suggest that Schroth exercises can improve spinal curvature, slow the progression of scoliosis, correct posture and increase muscle strength. We wish to confirm these results in a rigorous multicenter randomized controlled study. Current treatment for scoliosis in Canada consists of observation, bracing and surgery. Ultimately, our goal is to expand the treatment for scoliosis, by adding Schroth exercises as a physiotherapeutic standard of care for patients who will likely benefit from them.

Since April 2011 we have recruited 50 patients for this study and we will continue until 258 patients have been enrolled. The eligibility criteria of study participants are:

- Females with adolescent idiopathic scoliosis (AIS)
- Age 10-16 years
- Wearing a brace or not
- A Cobb angle between 10° and 45° on a frontal radiograph
- Risser sign  $\leq 3$  (skeletally immature)

Surgical candidates, patients diagnosed with other type of scoliosis or ones having had a spinal fusion will be excluded.

All participants will undergo a standard baseline examination including questionnaires and a physical examination ( $\approx 1.5$  hours). The assessments will be repeated at 3, 6, 9 and 12 month follow-up visits. At the beginning of the treatment, a patient will receive five 1-hour long individual sessions with a certified Schroth therapist to learn the Schroth principles, as well as to learn the exercises. After that, a participant will be required to come to weekly 1-hour long group sessions led by the Schroth therapist. During these visits, a patient's performance will be monitored and the treatment adjusted appropriately. A copy of the study protocol is available on request.

Each participant has an equal chance of being randomized into one of the groups. Our study differs from most other controlled studies, because all recruited participants eventually receive the treatment, regardless of the randomization outcome. The patients randomized to the exercise group receive the treatment upon the enrollment, while the controls begin treatment after the 6 month follow-up.

If you are interested, we can be contacted to discuss this study in more detail. Further, we kindly ask for your permission to post a recruitment ad in your waiting room. We would also appreciate if you could inform potential study candidates visiting your clinic of our study and suggest they contact the Principal investigators using the contact information below to discuss informed consent to participate. Patients consenting to participate will be assessed and followed-up at the Edmonton Scoliosis clinic during their participation in the trial.

We look forward to discussing our study in more details.

Sincerely,

Dr. Eric Parent

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