

TCS/20/02 - SonoSpeech Cleft Pilot: A pilot randomised control trial of ultrasound visual biofeedback versus standard intervention for children with cleft lip and palate.

Children with cleft lip and palate can continue to have problems producing clear speech after surgery. This can lead to social, emotional, and educational challenges. Treatment involves teaching children the correct tongue movements to produce speech sounds. This is known as articulation intervention. However, this intervention is challenging because the tongue is hidden from view and movements are difficult to see and describe. This project will try a new treatment, ultrasound visual biofeedback. In this treatment an ultrasound scanner similar to that used to image babies in the womb, is placed under the chin allowing children to see their tongue movements in real-time. The Speech and Language Therapist helps the child to use this real-time dynamic information to change their tongue movements. Ultrasound Visual Biofeedback has already been used successfully with children with other types of speech disorders and with children with Cleft Lip and Palate to measure the severity of the speech disorder. In this study children with Cleft Lip and Palate will be randomly assigned to either U-VBF or articulation intervention. We will measure the children's speech before, during, and after both interventions to determine how feasible and acceptable the treatment is to families and to plan for a larger study.