

Articulation swallowing orthodontist –case  
Articulation reveals Dyspraxia problems - case

A Speech Pathologist does so much more than the community generally understands . The Speech Pathologist is a very important link with schools in educating from infancy right through to secondary school and beyond.

In an attempt to try and help people in the community as much as possible I will be writing a regular column. The different case histories presented will show by example the great range and diversity of support we are able to give and how it can help the person in their life. Often it will be closely related to the work done by other professionals.

Case 1: Stewart, a boy, who presented with articulation problems and on correcting these it assisted the Orthodontist's work as a side benefit.

Case 2: Nicole presented with seemingly simple mispronunciation of a couple of sounds. She in fact had quite a complex problem but with help, this has been corrected.

Stewart...

A recent assessment of the 10 year old boy named Stewart revealed the following results.

Stewart was having difficulty with clarity of speech and so was assessed by a Speech Pathologist using an articulation assessment. This indicated that Stewart mispronounced one sound at word level which was the /th / sound.

Stewart was substituting an /f/ for a /th/ sound in all positions in words and during conversation.

Stewart should be able to produce this sound accurately by approximately seven years of age. An informal observation of Stewart's conversational language revealed that he was distorting some of his vowel sounds making them more in the back of his throat. He also had difficulties producing multisyllabic words and accurately pronouncing some blend sounds such as "tasks".

Assessment of Stewart's ability to sequence sounds rapidly, indicated a severe deficit. This then offers a reason why he had difficulty articulating multisyllabic words.

Further observation revealed that Stewart is a chronic mouth breather. Stewart's top lip does not come down to make a seal with his bottom lip even when he is simply at rest. Stewart also has an overbite, which is being treated by an Orthodontist. In addition Stewart exhibited a tongue thrust-swallowing pattern. (i.e. When swallowing, the tongue is pushed against the front teeth or between

the teeth.) Assessment also revealed he was not using his jaw muscles to swallow. In a normal swallow the teeth are clenched together by the jaw muscles, the tongue is placed up on the roof of the mouth and rolled backwards like a tip truck, to then dump the food down the food pipe (oesophagus).

Stewart's swallow is an immature swallow similar to that of an infant. This pattern can be caused by prolonged thumb sucking, allergies, enlarged adenoids and / or tonsils or a high narrow hard palate which then develops into a tongue thrust swallow and possible articulation and dentition problems such as Stewart is experiencing.

Stewart has now had therapy for ten sessions and can accurately produce the "th" sound and can achieve a normal swallow. Stewart's bite has improved over the last few months, which the Orthodontist attributed to the speech pathology treatment.

Nicole

Nicole's mother was concerned about her daughter's poor pronunciation skills.

Following an assessment by the Speech Pathologist she was found to have an articulation delay. Nicole is four years of age and is described by her mother as "talkative with rushed speech and sometimes hard to understand."

A speech and language history revealed that Nicole did not babble that is, play with sounds at a young age. (eg. making the sounds "mum, mum, mum", "bub, bub, bub".)

Nicole spoke her first words at approximately 12 months and simple phrases before two years of age. These are within the normal range except for the lack of babbling. This lack of babbling is a common feature in children who have speech and language problems.

Nicole is aware of the difficulty and other members of the family and those around her remark upon it.

On assessment of Nicole's speech skills it was revealed that she in fact mispronounced several sounds in the initial, medial or final position of a word. She also had difficulty with blend consonant sounds such as "pl" in please or "tr" in tree.

Nicole was recommended to have a period of therapy in addition to having her hearing fully checked to diagnose any possible hearing loss difficulties, which can affect speech production.

Nicole commenced therapy focusing on the early developmental sounds which she had difficulty with such as "k" and "g".

She found it extremely difficult to actually make a 'k' or 'g' sound and it was realised in the second session that something else was contributing to her



difficulty in being able to accurately produce these sounds. Nicole was assessed for oral dyspraxia. Dyspraxia is a motor planning disorder meaning an inability to carry out voluntary movements involving the muscles of the face.

Nicole had marked difficulties in this area explaining why she had problems producing sounds. In finding this, therapy then focused on helping Nicole produce single movements such as licking and puckering lips, coughing and yawning on command.

Nicole can produce all these movements automatically however the breakdown occurs when she has to produce a movement voluntarily. This then inhibits her ability to learn the correct pronunciation of single sounds.

Following intensive therapy focusing on treatment of her oral dyspraxia she can now produce 'k' and 'g' sounds in words and is improving in conversation.