ITS INTEGRATED TREATMENT SERVICES

Speech and Language Talk Tools Summary Report

Name: Jennifer Mc Kitterick	DOB: 11.12.94
Address: 126 Julian Road, West Bridgeford, Nottingham, NG9 2QR	

Jennifer has been assessed across two 2 hour sessions using the Talk Tools assessment and therapy hierarchies on the following dates; 26th Jan 2010 at school and the 26th Feb 2010 at home.

Oral Motor skills and Talk Tools assessment findings

Jennifer was happy to engage in a range of oral motor activities that included putting therapy tools in her mouth. She required sustained concentration and prolonged effort to engage in the range of activities and did so very well. Ashley a support worker at school, attended the school session and took video footage of the assessment. Sue (Jennifer's mother) and one of her care workers attended the home visiting session and took video footage of her work.

Jennifer has also been observed across her meal time and during her medication time whilst at home, this has enabled me to observe her normal eating patterns and reported concerns.

Taking medication:

I have observed Jennifer take her meds and have discussed with her parents the normal process which they follow. Jennifer would benefit from sitting on a firm supportive chair preferably with arms when taking medication. The reason being is that Jennifer is trying to sustain core postural support in the trunk of her body whilst trying to control her jaw, tongue and lips into positions to take the medicine. Jennifer really needs to focus on the later movements, therefore good postural support will enable this. This is also tru on meal times. Jennifer does not necessarily need specialised seating, just a good supportive chiar with arms, that fits under the table and gives her good support.

Mouth and jaw appearance:

Jennifer presents with an open bit and a high/deep palate. She has some dentition difficulties – meaning that her teeth sit very low in her gums.

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Toothette:

The Talk tools assessment started with an external sensory assessment. Jennifer experienced firm touch around her upper body, shoulders, before accepting touch on her cheeks, her chin and finally her lips. We agreed on a system, where Jennifer reported good, bad or ok after I used the toothette within each part of her mouth.

She accepted a toothette around her lips, and then on his upper gum ridges, lower gum ridges, her palate, her tongue and under her tongue. She also accepted this again with vibration.

It was apparent that Jennifer is quite sensitive on her top gums and teeth although less sensitive on her bottom gums and teeth. Jennifer's mother has reported information about her dentition which would explain the upper sensitivity. Also observation of Jennifer's teeth revealed they are very low in her gums.

Jennifer appeared more comfortable with vibration, this can be a good technique before feeding, preparing her articulators for touch through feeding. It may act as a desensitiser or an alerter.

Jennifer's palate is extremely high and deep and it appears to have very little sensitivity. Jennifer allowed the toothette to role across her palate to a distance quite far back. This may usually trigger a gag reaction for other children, but did not for Jennifer.

Generally this shows that Jennifer may not always be aware that food is up in her high palate, unless her tongue catches a flavour. Jennifer is reported to tell her parents when she has food stuck.

She may be sensitive to some feeding utensils, parents report they use a method of placing food towards the upper molars near the back of her mouth, needing to scrape off the food on her teeth. Jennifer has a fear of forks and will not allow her parents to use a fork during meal times. This is due to a bad experience with a metal fork when younger.

Bite Blocks:

Jennifer accepted a bite block in her mouth which is a tool used to establish and develop jaw strength. If the jaw is not strong in a range of positions, required for speech production and feeding, then she will not be able to make isolated movements with her tongue (including lateralisation – moving the tongue side to side and elevation – moving the tongue up and down). Equally without jaw grading you can not achieve isolated lip protrusion, such as that used to make the sound sh, or how we use our lips in sucking. She would not easily make movements with the teeth, such as those used when making the sounds f and v, or the movement used when retrieving food off our lower lip and finally she would not be able to use tongue retraction which is an essential skills used in feeding off a spoon or drinking with a straw as well as a skill required to produce many speech sounds.

There are 7 bite blocks which the child needs to achieve to ensure good jaw grading. The success criteria at each stage is to be able to hold the bite block on the left and then the right molars for 15 seconds against resistance, then also across the front of the jaw behind the incisors for 15 seconds against resistance. Jennifer achieved holding his bite block 3 on the left, right and front position with resistance for up to 7 seconds. This was an extremely difficult task for her but one in much need of developing, I would suggest that Jennifer starts on bite block 1 holding it in all three positions for 15 counts with resistance. This would need to be carried out at least once a day. It would be a good activity to do prior to eating so as to prepare her articulators.

Bubbles:

Jennifer was assessed using the bubble hierarchy, which moves children through the stages of blowing bubbles, using good jaw grading, lip rounding and protrusion, tongue retraction and sustained breath control. Jennifer was able to use the skills required to blow bubbles independently but with less accuracy than I would like.

Jennifer compensates for her poor breath control by using jaw fixing to support blowing the bubbles. She uses airflow around her teeth to blow bubbles rather than using lip protrusion to direct her airflow. Sue reports however that Jennifer has never been able to blow bubbles, so this was a success In itself for her. With hands on feedback by the therapist, protruding Jennifer's lips as she blew, Jennifer was able to achieve a more sustained and more pressurised airflow.

In order to raise Jennifer's awareness of lip protrusion I reverted back to stage one of the bubble hierarchy – popping a bubble on the lips – encouraging lip protrusion and supported lip rounding, in order to raise sensory awareness. Jennifer enjoyed this activity and initiated some lip movements when the bubble came near. Jennifer benefited from hands on tactile feedback to support her lips to take up a rounded position, this involves gently squeezing each side of her cheeks. Jennifer also requires support under her chin, to support better jaw grading.

Jennifer would benefit from some further work on the bubble hierarchy, using the popping on lips, whispered 'hoo' sounds and then moving back to independent blowing.

Straw drinking:

Jennifer has never been able to drink liquids using a straw. However with the use of a honey bear bottle (a bear shaped bottle that allows the therapist to squeeze the bottom to support the liquid moving) Jennifer accepted liquid in her mouth through a straw. The straw was presented with a lip rim, which ensures that she can not use her teeth for straw drinking. We need to encourage tongue retraction and lip rounding within this activity. Jennifer uses an open cup to drink from at present with very apparent tongue protrusion, either sticking it out within or below the cup. This encourages the child to use the teeth and tongue to stabilise the jaw, rather than relying on good jaw grading, it also encourages tongue protrusion (tongue out) rather than tongue retraction (tongue drawn back) and finally encourages an open mouth posture rather than lip closure.. This results in very messy drinking.

After three attempts at school, Jennifer was then able to draw up some liquid on her own using tongue retraction. Her open bite requires the therapists to help her to manipulate her lips around the straw until she gains the sensation of drinking. Jennifer is trying to form a new motor plan when straw drinking, so it may take several attempts before the motor plan is formed securely.

Jennifer will soon have her own honey bear and straw set to begin using and also a recessed cup which enables a reduced flow but still allows to drink from the rim of a cup, enhancing tongue retraction and lip closure. Jennifer had great success using the two holed cup, along with prompts to remove the cup from her mouth when she has enough liquid.

Duration blowing tubes:

Jennifer used the half a metre expandable tubes to blow a ping pong ball down. This activity requires good lip rounding, tongue retraction and breath control. Jennifer found the task difficult but managed to approximate the same lip/teeth pattern which she used for bubble blowing. This is a further useful activity to practice.

Horn hierarchy:
Jennifer was introduced to horn one, which requires tongue retraction, lip closure and phonation/breath control for blowing. Jennifer achieved about 5 sounds out of this horn, which was a brilliant achievement since she has never been able to blow a horn before.

Jennifer required support with lip closure due to her open bite, she approximated her lips around the horn, some air escaped which results in weak pressure and a quieter sounds. Jennifer was motivated by this activity and would benefit from work on the horn hierarchy.

Tongue depressor between the lips:

Jennifer was asked to hold the tongue depressor (cheery flavoured) between her lips bringing her lips together. She was not able to naturally bring her lips together to closure however with hands on manipulation of her lips, she gained the sensation and was able to pull her bottom lip up with more strength, Her top lip is the weaker muscle. After such activities however it was noticeable that Jennifer's lips were in a more closed position at rest. Further practice in this activity would be beneficial.

Conclusions and recommendations:

Jennifer has responded really well to the structure of the tasks that Talk Tools offers. This enables her to build better attention and listening skills as well as support behaviour modification – engaging herself in a task which she might find difficult and would otherwise avoid. It has been an excellent approach to build a good rapport with Jennifer, building trust and cooperation.

The Talk Tools approach believes in assimilating the experiences used through oral -motor exercises and feeding to develop speech sound patterns and good oral motor skills. This means that by developing the oral motor skills used in good feeding we can go on to develop better skills in speech production.

Jennifer's feeding is currently quite slow and messy with poor oral motor skills to achieve good chewing, tongue lateralisation for clearing food and poor lip protrusion and tongue retraction for drinking. By working on the advised exercises it is hoped that we can improve Jennifer's tidy and more independent eating skills as well as produce greater clarity in her speech production.

Jennifer's speech sounds assessment shows, she uses the back of her mouth a lot in speech, not making use of the front of her mouth for t and d sounds. She struggles with lip protrusion so sounds like s and sh are not apparent. She struggles with the articulation of v and can attempt f, which is likely to arise from poor jaw grading not allowing her other articulators to work in isolation.

Jennifer has poor contrasts in vowel sounds – which require different jaw heights for example 'ahh' and 'eee', this makes for poor clarity in speech.

Jennifer's breath control is poor, making joined up sentences difficult to produce and for the listener to understand.

I would suggest purchasing the following kit to commence a Talk Tools therapy programme. The following activities will be used;

- Bubble blowing step 1,2 and 3
- Horn blowing – step 1

- Toothette sensory work
- Straw drinking – step 1
- Use of a recessed cup and honey bear
- Jaw grading bite blocks – step 1
- Jaw exerciser step 1 – using chewy tubes
- In time a slow feed technique and use of a z vibe for feeding which shall support her developing tidier and faster feeding skills.

It should be noted that the jaw grading work will have the most significant impact on her ability to achieve success in straw drinking, horn blowing, bubble blowing and of course feeding.

I will order the above equipment for Jennifer's parents once consent to purchase has been gained.

I hope to return with them within March 2010 to support parents and care staff implementing chosen parts of the programme.

I would also like to meet with school staff and Jennifer's NHS SALT – Josh in order to discuss the approach and agree any activities that can be carried out in school.

The use of the video footage taken throughout this assessment will be useful in training others in the approach.

I would be more than happy to discuss in further details with parents, teaching staff and MDT colleagues the details of this report.

Signed: 24.02.10

Sarah Needham
Independent Speech and Language Therapist
Integrated Treatment Services