Sub-Mucous Cleft Palate – Case Histories

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The occurrence of Sub-mucous Cleft Palate is rare, but even so, it is vitally important that the speech therapist be aware of the condition as a possible cause of nasal speech. She should be able to recognise the symptoms which lead to its diagnosis and refer all suspected cases to a surgeon who deals with cleft lip and palate for consultation before undertaking treatment.

It has been my experience that sub-mucous cleft palate is a condition unknown and unrecognised by many in general medical, surgical and dental practice, whereas it is quickly recognised by surgeons concerned with the treatment of cleft lip and palate.

The following case histories are presented to illustrate this observation, and to stress the importance of accurate diagnosis by the speech therapist in the handling of these cases.

CASE A.

A European girl, 14 years of age.

She was referred for speech therapy three years previously with nasal speech. She received treatment at school for one year and at Clinic for one year. Further treatment was recommended but transport difficulties made this impossible. Improvement was negligible. During the second year of treatment the possibility of a sub-mucous cleft palate was suggested, but not verified.

On Examination :

Hard Palate—there was no bony union for the posterior two-thirds of the hard palate. This V-shaped notch of the posterior border was easily visible and palpation was unnecessary. The oral mucosa was intact.

Soft Palate—there was a medial mucous line about 1/10th of an inch wide running from the base of the V of the hard palate the full length of the soft palate, which widened on phonation. This mucous line glowed red on illumination of the nasopharynx, confirming the absence of muscle union. The palate appeared short and the uvula was bifid.

Velopharyngeal closure was negative on tests and in speech. **Articulation** was correct but weak. There was consistent nasal tone.

This diagnosis of sub-mucous cleft palate was confirmed by the Plastic Surgery Unit, and surgery was undertaken. Further speech therapy should have followed immediately, but the girl had lost all interest and incentive and failed to attend in spite of arrangements being made to facilitate transport.

Had she been given the opportunity of surgical repair 2—3 years earlier, instead of the constant failure to improve with speech therapy, the results would probably have been more encouraging.

CAST B.

An Indian girl aged 9 years. Her home language was Ghurgurati and she attended an English medium school. She was referred from the Dental Hospital for examination and treatment on account of her very limited language ability. She presented a complicated picture. Her birth and early history and subsequent neurological examinations revealed the probability of her being a brain injured child. She was very small for her age and there was a history of earlier tubercular infection.

At birth the nose appeared flattened and was described by the father as being "almost absent." Feeding proved very difficult as the child could not suck, and there was regurgitation through the nose. There was no family history of cleft palate or speech defects. An examination at another speech clinic two years earlier, failed to reveal any palate abnormality.

On Examination :

Nose—bridge appeared flattened and nasal airways narrow. **Teeth**—malocclusion and abnormal structure of upper and lower incisors, (receiving treatment at time of examination). **Hard Palate**—there was a high narrow arch with a marked V shaped notch in the centre of the posterior border. **Soft Palate**—this appeared short and fairly mobile, there was a bifid uvula. **Velopharyngeal closure** was negative both on tests and in speech. There was an overall nasal tone and nasal escape. **Articulation** was grossly defective.

It seemed to me that this was a case of sub-mucous cleft palate and/or congenital short palate, in addition to a severe language retardation probably due to brain damage. However, controversial opinions were expressed regarding her palatal condition by others concerned with her treatment. She was then referred to a Plastic Surgeon for

a further opinion. He reported that this was certainly a case of sub-mucous cleft palate and that the soft palate was definitely short. On account of the child's generally poor physical condition, he advised that the case should be reconsidered for the possibility of surgical repair three years later. This examination should take place in 1957. It was decided to treat the language disturbance in the meantime, in spite of the complication of grossly defective articulation and language medium.

CASE C.

A coloured boy aged 11 years. This child was referred for treatment by an Ear, Nose and Throat Department, where he was receiving treatment for a discharging right ear. He was referred as a repaired cleft lip and palate. This was only partly true, his lip had been repaired at 2 years of age, but there had been no further operations of any kind.

His young stepmother could supply no information concerning his early development and possible feeding difficulties. A sister, six years younger, had a repaired double cleft lip and palate. No other family incidence of cleft palate or speech defect was reported. The boy was very selfconscious of his grossly defective speech and fought back when teased. When examined he was found to be a friendly co-operative child and very anxious to be helped.

On Examination:

Lip—There was a repaired right cleft lip, the lip was mobile. **Teeth**—right upper premolar and incisors were crooked. **Hard Palate**—there was a high narrow arch particularly anteriorly, and a marked V shaped notch medially at the posterior border. **Soft Palate**—there was a central transparent mucous line which widened on phonation, and appeared as a red line when the nasopharynx was illuminated, the palate appeared short with limited mobility and there was a bifid uvula. **Velopharyngeal closure** was negative on tests and in speech. **Articulation** was grossly defective with frequent use of the glottal stop and speech was frequently unintelligible. There was an overall nasal tone.

The provisional diagnosis was sub-mucous cleft palate associated with a right cleft lip This was later confirmed by the Plastic Surgery unit, where he was put on the list for surgical repair. Speech Therapy was to be postponed until after the operation.

CASE D.

A European boy of 6 years of age. He and his sister were in the care of Child Welfare. His mother was deceased and no early history was available. His sister had a repaired cleft of the soft palate and normal speech with the exception of sigmatism. The boy's was a case complicated by multiple congenital abnormalities, spina bifida oculta, hypertonia and dextrocardia with a cystolic murmur. A few months before my examination the child had had encephalitis, and about six months after examination poliomyelitis (non-paralytic). He was very small for his age and had not yet been to school. He had been examined a few months earlier with a view to special treatment but no mention was made of a palatal abnormality.

On Examination:

Teeth—teeth were in a very poor condition and the upper incisors had been extracted. **Hard Palate**—there was no medial notch of the posterior border, but the shape of the posterior border resembled a wide V based anteriorly and spreading laterally to the regions of the hamular process. (I have only once before seen this in a case of congenitally short palate). The **Soft Palate** appeared short with limited mobility, and on illumination of the nasopharynx a red mucous line appeared down the full length of the soft palate. The uvula was bifid. The pharynx was wide laterally. **Velopharyngeal closure** was negative. **Articulation**—there were some articulatory errors, but speech was intelligible. There was an overall nasality.

The provisional diagnosis of sub-mucous cleft of the soft palate was later confirmed by the Plastic Surgery Unit. There was no question of operation for the time being, in this case, on account of his general physical condition and multiple abnormalities. It was decided he should receive a short period of speech therapy to ascertain what improvement could be expected in spite of the condition.

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