

## Age weight, quality of muscle and speech!

Sir,

The fraternity of cleft and craniofacial surgeons, be they plastic or maxillofacial surgeons, is a relatively small one. However, in their parleys, the divergence of views expressed on fundamental matters is so wide that it is difficult to fathom as to where THE TRUTH lies. It has been said "In life, so in surgery, there is no ABSOLUTE TRUTH: For surgery is part science, part art. In reconstructive surgery there is perhaps a little more art than there is in other disciplines of surgery.

Recently a question was raised among cleft palate surgeons about the inter-relationship of Age – Weight – Quality of muscle and the ultimate aim in cleft palate surgery – Speech. How often have parents been turned away with a directive from the surgeon - "Your baby is underweight, come back when he weighs 10 kg"?

Now, when we talk about the muscle in relationship to weight, we mention Quality not bulk. Weight may affect bulk, not quality. Quality can only be assessed functionally and not by the eye. (Those of us who have done weight lifting in our youth have noticed time and time again that the well-knit small muscled man out lifts the man with bulging muscles.) Therein lies the importance of QUALITY. The test of Quality is to review the patient six months to a year after surgery and assess how well the palate moves. In spite of excellent movement the speech may still not be what we desired or anticipated. This is because of other factors – length of the soft palate, the distance from the posterior pharyngeal wall, and lateral and posterior pharyngeal wall function. In such cases, the poor speech has nothing to do with the quality of muscles in the palate.

The average weight of our cleft palate children at 1 year of age is 9-10 kg. But we have operated on cleft palate babies with a body weight as low as 5 kg. In every case, irrespective of the weight, we have done a radical dissection and retroposition of the muscle of Veau? We believe that there has been no difference in the speech results of these cases when compared with the ones with a body weight of 9-10 kg.

Now coming to the crux of the matter? Is the weight of the child at the time of surgery of any importance. The answer is Yes and No! It is of no importance from the point of view of Quality of muscle and functional speech results. But it is of immense importance as a POINTER to detect causes for failure to thrive.

If the baby is under-weight and fails to thrive in spite of proper feeding, then the clinician must look for a serious systemic disease, and the commonest is a congenital heart condition.<sup>[1]</sup> The common or garden ones are not easy to miss, but there are the rare ones like the left coronary artery arising from the pulmonary artery instead of the Aorta (A.L.C.A.P.A) which perfuses the left ventricle with cyanosed blood. Such a child may or may not have a murmur but there will always be gross failure to thrive.<sup>[1]</sup> Sometime ago we had such a child on our

hands, we repeatedly counselled the mother on feeding, blamed the mother for neglect and ultimately frustrated, we decided to operate. It was our good fortune that the child did not turn up for surgery. Later, when the child did come, the parents told us that a clever general practitioner who was not a paediatrician, told them “your child must have some congenital heart defect; go to the Sree Chitra Tirunal Cardiac Centre.” There they detected the anomaly and relocated the coronary artery to the Aorta. The child gained weight in 3 months and the palate was repaired. We have seen other serious congenital problems in cleft children like, congenital absence of one lung, congenital cardiomyopathy (a fatal condition), diaphragmatic hernias, eventration of the diaphragm etc. The moral of the story is that failure to gain weight may be a pointer to a serious congenital disease. LOOK FOR ONE. We were subsequently told by our cardiologist that if we had operated on this child prior to correction of the congenital heart disease we might have lost the child.

By making dogmatic statements unsubstantiated by logical evidence, we are making a religion out of science and art. There is great danger in this. We must remember that this is the age of evidence-based medicine. The time has come when we must lay to rest the debate about age and weight. There is more than conclusive evidence that the earlier you repair the palate, the better the chances of a good speech result. Most exponents agree that the repair should be between 7 to 12 months. If objections are raised regarding damage to growth of the maxilla due to early intervention, we have excellent and reliable modalities to combat this setback. On the other hand, for bad speech, we have the various pharyngoplasties, the results of which remain speculative and, sometimes, pathetic.

### **H.S. Adenwalla, P.V. Narayanan**

Department of Plastic Surgery, Burns and The Charles Pinto Centre for Cleft Lip, Palate and Craniofacial Anomalies, Jubilee Mission Medical College and Research Institute, Trichur, India

#### **Address for correspondence:**

Dr. Hirji S. Adenwalla, Department of Plastic Surgery, Burns and The Charles Pinto Centre for Cleft Lip, Palate and Craniofacial Anomalies, Jubilee Mission Medical College and Research Institute, Trichur – 680 005, India. E-mail: charlespinto@sify.com

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