

Weaning in Children with Congenital Heart Diseases from Nutritional Tube Is Easier than in Other Children

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The psychosomatic and psychotherapeutic unit of the University hospital for children in Graz has developed an interdisciplinary inpatient tube-weaning program to wean severely ill children [1, 2] from nutritional tube. Ongoing evaluation of this program for 6 years made it possible to collect enough data for valid publication. It may be interesting for cardiologists, that 20 out of 110 patients (18.2%) were tube fed following the treatment of congenital heart diseases and that all of these 20 patients could be weaned from tube successfully [3]. In comparison to the other patients with various diagnosis statistical analysis showed, that cardiological ill patients do show a significant better chance to get of the tube (Log-Rank 0.017; Generalized Wilcoxon 0.20; Tarone-Ware 0.16) as the others. This result does correlate very well with our clinical experience. We tried to find out the cause. The classification of severity of the disease according to International Classification of Functioning, Disability and Health [4] showed that cardiological ill children do nearly have the same mean severity code (3.12 vs. 3.37) as the others.

The Cox-Model did show that increased body weight at admission increases the chance for weaning. It could also be shown that weaning is harder if the patients are older (6% per month). Our cardiological ill group in mean is older than the others and so we believe that overfeeding before surgery [5] is the main cause for better weaning

results in these children. Usually they are overfed and show normal oral intake and operation time was not delayed.

As hypotheses, we believe that easier weaning of the cardiological ill children is caused by overfeeding supported by nutritional tubes. In clinical experience, all these children are fed by tube to gain weight for better operability [6]. Most of them do not loose much weight during the surgical period of treatment and achieve in our unit overfed. This overfeeding may be the cause for easier weaning from tube.

In conclusion, we believe that tube feeding could be prevented in most cases without reducing the chance to survive operation. From a psychodynamic point of view feeding these children by tube can be seen as maltreatment.

Another aspect could be that cardiological ill children do have enough weight and so the primary caregivers are not in fear of weight loss. This reduced stress level of the caregiver may be another cause for better weaning results.

Preventing tube feeding would cause an enormous decrease of complications and decreased mortality rates [7] caused by tube feeding. Overfeeding might reduce the outcome of technically well-done operation due to the decreased life quality and it is imposing a burden to the mother-child relationship [8].

References

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