primary studies - published, non RCT

PTH-145 Comparison Of Percutaneous Endoscopic Gastrostomy, Megestrol Acetate And Nasogastric Feeding In Patients With Cystic Fibrosis.

Code: PM25021842 **Year:** 2014 **Date:** 2014 **Author:** Shabbir S

Study design (if review, criteria of inclusion for studies)

Retrospective study.

Participants

CF patients attending the Manchester Adult Cystic Fibrosis Centre (MACFC) between June 1998 and June 2012 including all living patients on any of the interventions. 53 patients fulfilled criteria at 6 months: 18 MA, 14 NG and 21 PEG.

Interventions

3 interventions to prevent weight loss at 6 and 12 months: i) Percutaneous Endoscopic Gastrostomy (PEG), ii) oral steroid therapy (megestrol acetate- MA) or iii) nasogastric (NG) tube feeding.

Outcome measures

Changes in weight and FEV1

Main results

There were significant increases in weight from post-intervention time 0 for MA (mean 3.0 kg, 95% CI: 1.16, 4.85) and NG (mean 2.9 kg, 95% CI: 0.84, 4.97), but not for PEG (mean 1.0 kg, 95% CI: 0.64, 2.73). There were no significant changes in FEV1 from time 0 for any of the 3interventions at 6 months; although the ratio of change in FEV1 (6 months:time 0) showed small reductions for all 3 interventions; MA (ratio 0.987, 95% CI: 0.882, 1.104), NG (ratio 0.996, 95% CI: 0.876, 1.133) and PEG (ratio 0.925, 95% CI: 0.836, 1.024). 50 patients fulfilled criteria at 12 months: 16 MA, 13 NG and 21 PEG. There were significant increases in weight from time 0 for MA(mean 2.6 kg, 95% CI: 0.38, 4.78), NG (mean 3.2 kg, 95% CI: 0.73, 5.67) and PEG (mean 2.5 kg, 95% CI: 0.60, 4.46). There were no significant changes in FEV1 over 12 months for any of the 3 interventions although the ratio of change in FEV1 (12 months:time 0) showed small changes for MA (ratio 1.030, 95% CI: 0.923, 1.150), NG (ratio 0.957, 95% CI: 0.840, 1.092) and PEG (ratio 1.041, 95% CI: 0.944, 1.147).

Authors' conclusions

All 3 interventions appear to be equally effective means of improving nutritional status as measured by weight gain, and possibly stabilise lung function. Our study is the first which to compare these 3 different interventions but is limited by the small sample size and lack of a control group. Robust prospective studies comparing interventions to improve nutritional status in these patients are required.

http://dx.doi.org/10.1136/gutjnl-2014-307263.591

See also

Gut. 2014 Jun;63 Suppl 1:A276. doi: 10.1136/gutjnl-2014-307263.591.

Keywords

non pharmacological intervention - surg; Adolescent; Appetite Stimulants; Caloric Intake; Child; Hormones; Infant; megestrol; non pharmacological intervention - diet; Nutrition Disorders; pharmacological_intervention; placebo; Supplementation; Malnutrition; Continuous; Enteral Nutrition; Percutaneous Endoscopic Gastrostomy (PEG);