

primary studies - published RCT

Oral Glutathione and Growth in Cystic Fibrosis: A Multi-Center, Randomized, Placebo-Controlled, Double-Blind Trial.

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

Multi-center, randomized, placebo-controlled, double-blind, Phase II clinical trial

Participants

58 Patients with CF between the ages of 2-10 years. Patients received reduced glutathione or placebo orally daily for 24 weeks.

Interventions

Glutathione or placebo orally daily for 24 weeks.

Outcome measures

The primary endpoint was the difference in change in weight-for-age z-scores from baseline through week 24 between treatment groups. Secondary endpoints included other anthropometrics, serum and fecal inflammatory markers in addition to other clinical outcomes.

Main results

No significant differences were seen between glutathione ($n=30$) and placebo ($n=28$) groups in the 6 month change in weight-for-age z-score (-0.08; 95% CI: -0.22, 0.06; $p=0.25$); absolute change in weight (kg) (-0.18; 95% CI: -0.55, 0.20; $p=0.35$); or absolute change in BMI kg/m (-0.06; 95% CI: -0.37, 0.25; $p=0.69$). There were no significant differences in other secondary endpoints. Overall, glutathione was safe and well tolerated.

Authors' conclusions

Oral glutathione supplementation did not impact growth or change serum or fecal inflammatory markers in pancreatic insufficient children with CF when compared to placebo.

<http://dx.doi.org/10.1097/MPG.0000000000002948>

See also

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Keywords

Oral; Glutathione; thiols; Antioxidants; pharmacological_intervention;