

314

GASTRIC EMPTYING IN ANOREXIC ADOLESCENTS MEASURED WITH THE ¹³C OCTANOIC ACID BREATH TEST

M.K.F. Docx¹, A. Simons², S. Staelens³, K. Verbeke⁴, J. Ramet⁵, G. Veereman-Wauters³

¹*Paediatrics and Chronic Diseases, Queen Paola Children's Hospital Antwerp*, ²*Child Psychiatry, Middelheim Hospital and University Hospital Antwerp*, ³*Gastroenterology and Nutrition, Queen Paola Children's Hospital Antwerp, Antwerp*, ⁴*Belgium Laboratory for Digestion and Absorption, University Hospital Leuven, Leuven*, ⁵*Paediatrics, Univ. Hosp. Antwerp, Belgium, Belgium*

Aim: Bloating, nausea, epigastric discomfort, belching and postprandial fullness are common gastrointestinal symptoms.

Patients: 18 anorexic girls and 2 anorexic boys (mean age: 15.65 y), BMI: mean: 15.53 ± kg/m² weight loss (mean: 22.92 (range 7.9-49.5%) participated in the study. All patients fulfilled the Diagnostic and Statistical manual of mental disorders, 4th edition. The ethical committee have given written approval of the study.

Methods: The testmeal consisted of 50 µL ¹³C octanoic acid was mixed with 17 g flour, 7 g sugar, 1 egg white, 1 frozen egg yolk and 40 ml half-skimmed milk to prepare a pancake, baked with 5 g. margarine. Sugar (5g) was added for consumption. This testmeal accounted for 230 cal (12,25 g proteins / 27 g carbohydrates/ 8,8 g fat). After fasting for at least 6 hr the patient ingested the meal in sitting position. Breath samples were collected in vacutainers: 2 basal breath samples prior to the testmeal, followed by one sample every 15 minutes during 4 hrs. Breath analysis was performed using Isotope Rate Mass Spectrometry (IRMS). Gastric emptying time (T1/2) was calculated (min) and GE curves were generated.

Results were compared to previously obtained values for GE of the similar solid testmeal in age matched healthy adolescent girls (M. Vandendriessche) 13 patients had a T1/2 exceeding P95 and were classified as having a strongly delayed gastric emptying, in one patient, T1/2 exceeded P75 which was classified as delayed whereas 6 patients have a normal gastric emptying.

In conclusion the ¹³C octanoic acid GE studies with a solid test meal demonstrate delayed gastric

emptying in AN adolescents and is the least invasive method to reliably assess gastric emptying.

315

THE CCC2000 BIRTH COHORT: PATTERNS OF FUNCTIONAL SOMATIC SYMPTOMS AND EATING BEHAVIOURS IN 5-7-YEAR-OLD CHILDREN

C.U. Rask¹, N. Micali², A.M. Skovgaard³

¹*Research Unit for Functional Disorders and Psychosomatics, Aarhus University Hospital, Aarhus, Denmark*, ²*Department of Child and Adolescent psychiatry, Institute of Psychiatry, King's College London, London, UK*, ³*Regional Centre for Child and Adolescent Psychiatry, Copenhagen University Hospital Glostrup, Copenhagen, Denmark*

Background and aims: The spectrum of functional somatic symptoms (FSS) and their relation with regulatory disturbances such as feeding/eating problems in childhood has received little attention. In this study, we analyze the prevalence of FSS and their associations with eating behaviours in 5-7-year-old children.

Methods: FSS and eating behaviours were measured in 1,327 children, at 5-7 years of age, from a random sample of the Copenhagen Child Cohort 2000. Parents were interviewed using 1) the Soma Assessment Interview on diverse FSS in children and 2) the Childhood Eating Assessment Inventory, a composite instrument derived from existing instruments and assessing different eating behaviours and their impact.

Results: In total, the 1-year prevalence of any FSS was 23.2%, and impairing FSS were found in 4.4%. Problematic eating behaviour in the child was reported by a quarter of the parents. Functional somatic symptoms were significantly associated with picky eating and emotional undereating ($\chi^2=4.6$, $p < 0.05$; $\chi^2= 4.9$, $p < 0.05$ respectively) but not with the other common eating behavioural constructs such as good appetite, poor/slow eating, delayed eating behaviour and snacking.

Conclusions: Functional somatic symptoms (FSS) and problematic eating behaviours are frequent complaints in the child population at age 5-7 years. The association between FSS and specific eating behaviours point to a common underlying cause for expression of distress in a subgroup of children with a likely need of clinical intervention.