Data from adult-onset to paediatric-onset CVS were included. Data were extracted into a standardised form.

Results The systematic search yielded 33 papers with 1141 cases of cyclic vomiting syndrome. All but one paper were retrospective studies. Both adult-onset and paediatric-onset CVS had a high association with headaches/migraines and psychiatric conditions such as anxiety/depression. Furthermore, in children travel sickness was noted in 28.3%. The mean duration and frequency of attacks were higher in adult-onset CVS compared to paediatric-CVS. Overall remission was achieved in 73.2% of cases. When tricyclic antidepressants were used, 75.5% of adult-onset CVS patients had a response (n=237) and 67.6% of paediatric onset-CVS patients (n=244). In adult-onset CVS, 37 patients had been treated with sumatriptan with a response rate of 56.8%. In paediatric-onset CVS, 91 patients had been treated with propranolol and amitriptyline resulting in a response rate of 86.8%. There were no studies focusing on the acute management of CVS.

Conclusion CVS is an intractable illness with a major impact on patient's quality of life. There is a long duration between symptom onset and diagnosis of the condition. There is a high association with headaches/migraines and anxiety/depression. Symptoms are more severe in adult-onset CVS. Tricyclic antidepressants have the most evidence and have high efficacy at reducing the frequency/duration or intensity of attacks. There is limited evidence on the acute management of CVS.

Abstract PWE-054 Table 1

	Adult-onset CVS (n=446)	Paediatric-onset CVS (n=695)
Age (mean years)	34.0	8.3
Age of onset (mean years)	25.4	5.2
Prevalence of headaches/migraines (%)	56.0	40.5
Family history of headache/migraine (%)	56.0	27.8
Co-existent anxiety/depression	39.7	26.7
Duration of CVS episode (mean days)	5.9	3.4
Frequency of CVS (episodes/month)	1.2	0.8

Competing interests None declared.

PWE-055 THE PREVALENCE, CLINICAL RELEVANCE AND IMPACT ON DIET OF LACTOSE INTOLERANCE IN A POPULATION WITH LACTASE DEFICIENCY: A RANDOMISED, DOUBLE-BLIND, DOSE RESPONSE STUDY IN HEALTHY SUBJECTS AND PATIENTS WITH DIARRHOEA PREDOMINANT IRRITABLE BOWEL SYNDROME

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Introduction Lactose Intolerance (LI) is a common clinical syndrome; however there is a lack of high quality evidence about its epidemiology, diagnosis and clinical relevance in health and patients with functional gastrointestinal disease. Additionally the impact of LI on intake of dairy produce is uncertain because previous studies have often tested tolerance only at very high doses and/or failed to assess both self perceived and objective lactose tolerance.

Aim To assess the prevalence of LI in a population with lactose malabsorption and the effect of LI on intake of dairy products in healthy volunteers (HVs) and patients with diarrhoea predominant irritable bowel syndrome (D-IBS).

Methods A Chinese population known to have a high prevalence of lactase deficiency was studied. 60 D-IBS patients and 60 HVs underwent hydrogen breath test (HBT) at 10 g, 20 g, 40 g lactose on three test days in a randomised, double-blind three way cross-over study. Lactose Malabsorption (LM; H2 rise >20 ppm) and intolerance (LI ≥2 point rise on validated symptom score) were assessed at each dose. Genetic sequencing of the lactase gene promoter region was also performed. The impact of LI (both self-reported and from HBT) on lactose intake was assessed by dietary questionnaire.

Results LM was prevalent in HVs and D-IBS patients (93% vs 92% at 40 g lactose, p=0.73). LI prevalence was lower in HVs than D-IBS patients at 10 g (3% vs 18%, OR 6.51 (CI 1.38 to 30.8), p=0.008), 20 g (22% vs 47%, OR 3.16 (CI 1.43 to 7.02), p=0.004) and 40 g (68% vs 85%, OR 2.63 (CI 1.08 to 6.42), p=0.03). The genotype in all participants was C/C-13 910 and no other SNP was identified on gene sequencing of the lactase gene regulatory sequence. Most participants (83/120 (69%)) included milk and dairy products in their diet; however D-IBS patients reported less frequent intake of dairy products than HVs and a smaller amount of lactose in the diet (D-IBS: 9.0 g (4.5–17.3) vs HVs: 19.5 g (6.0–36.4); p=0.040). D-IBS patients also self-reported LI more frequently than HVs (63% vs 22%, OR 6.25 (CI 2.78 to 14.0), p<0.001); however, self-reports of LI did not predict results of objective HBT.

Conclusion The likelihood of LI is increased in patients with D-IBS, especially at low lactose doses. Self reported lactose intolerance, but not objective LI on HBT, was associated with avoidance of dairy products.

Competing interests M Fox Grant/Research Support from: Nestle International, J Yang: None declared, Y Deng: None declared, Y Cong: None declared, M Fried: None declared, N Dai: None declared.

PWE-056 PROSPECTIVE EVALUATION OF 403 PATIENTS WITH DIARRHOEA PREDOMINANT IRRITABLE BOWEL SYNDROME (D-IBS) FULFILLING ROME II CRITERIA

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Introduction Irritable bowel syndrome (IBS) has a high prevalence with established diagnostic criteria (ROME) used to aid diagnosis. Despite increasing drives to make a positive diagnosis of IBS, patients may still require some investigations to exclude other organic conditions that may present with IBS type symptoms. There has been limited work evaluating diagnostic outcomes in this group of patients. We therefore investigated unselected patients presenting with D-IBS symptoms fulfilling ROME II criteria.

Methods Data were prospectively collected from consecutive patients meeting Rome II criteria for D-IBS in a university hospital. Demographic data, subsequent investigations and diagnostic yields of these tests were collected. All patients underwent haematologic, biochemical and immunologic testing prior to subsequent

Abstract PWE-056 Table 1 Final diagnoses in those fulfilling Rome II criteria for D-IBS

Diagnosis (total n=403, lost to follow follow-up n=14)	Patients (%)
Irritable bowel syndrome	301 (75)
Pancreatic insufficiency	28 (7)
Coeliac disease	23 (5)
Diverticular disease (endoscopic/radiological finding)	19 (5)
Lactose intolerance	8 (2)
Inflammatory bowel disease	4 (1)
Small bowel bacterial overgrowth	3 (0.7)
Carcinoid	2 (0.5)
Bile acid malabsorption	1 (0.2)