

So Many Patients Too Little Time A Dietetic Led Service

Elaine Buchanan
Lead Dietitian Paediatric Gastroenterology
Royal Hospital for Children, Glasgow











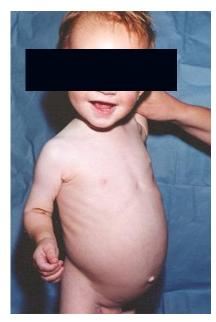


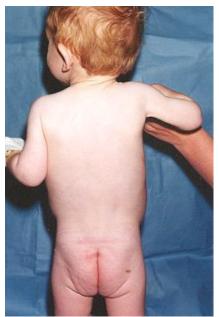




"Classical" Case

- Diarrhoea
- Faltering growth
- Vomiting
- Anorexia and weight loss
- Short stature
- Protuberant abdomen
- Irritability

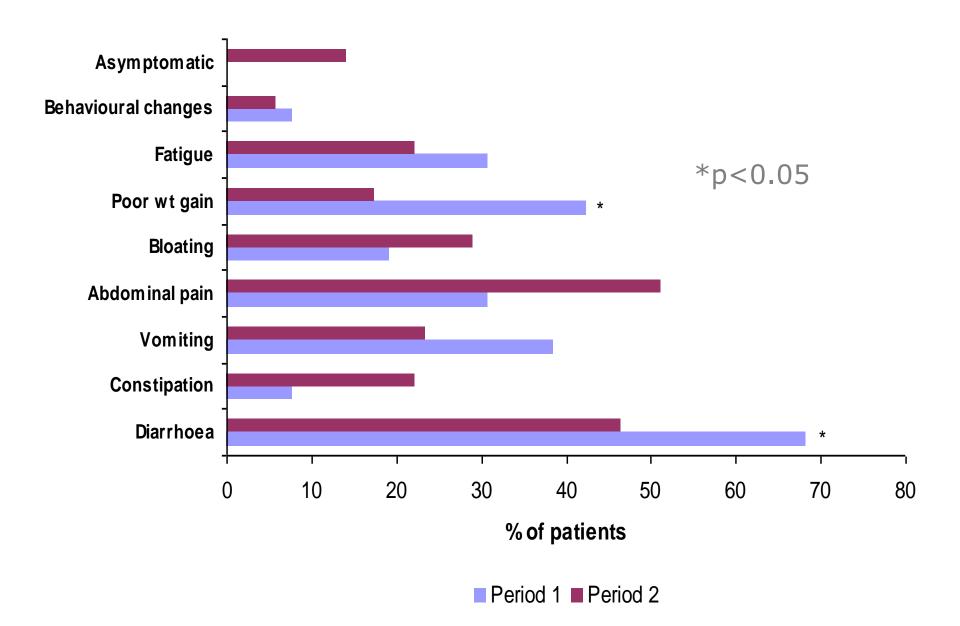




More Subtle Presentations

- Tiredness
- Frequent infections
- Constipation / rectal prolapse
- Pallor / anaemia
- Mouth ulcers, dental enamel defects
- IBS type symptoms

Clinical presentation of children with CD in two different periods



New Guidelines (2012) ESPGHAN¹/BSPGHAN²



Serology used for diagnosis

- Symptomatic pt
- Asymptomatic pt with associated condition
- 1.Husby S et al (2012). ESPGHAN Guidelines for the diagnosis of coeliac disease in children and adolescents. An evidence-based approach. JPGN. 54; 136-160
- 2. Coeliac Working Group of BSPGHAN (2012). Guideline for the diagnosis and management of coeliac disease in children. www.coeliac.org.uk



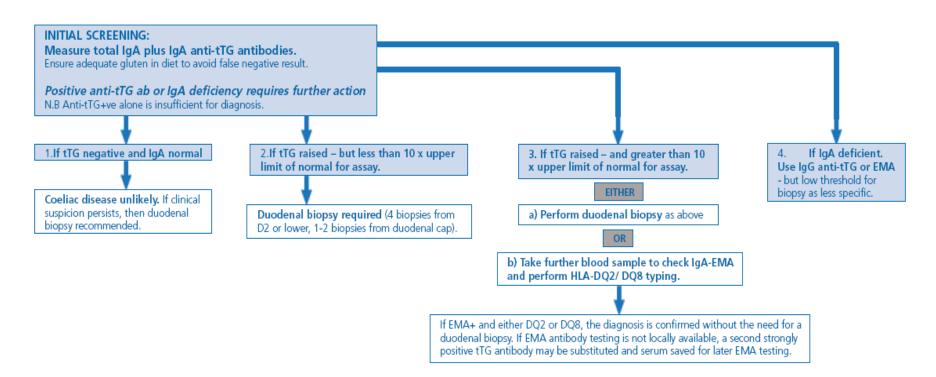


Guideline for the diagnosis and management of coeliac disease in children

Who to test

Symptomatic children

With: Persistent diarrhoea, Faltering growth, Idiopathic short stature, Abdominal pain, Vomiting, Abdominal distension, Constipation, Dermatitis herpetiformis, Dental enamel defect, Osteoporosis, Pathological fractures, Delayed menarche, Unexplained anaemia or Iron deficient anaemia unresponsive to treatment, Recurrent aphthous stomatitis, Unexplained liver disease, Lassitude/weakness.





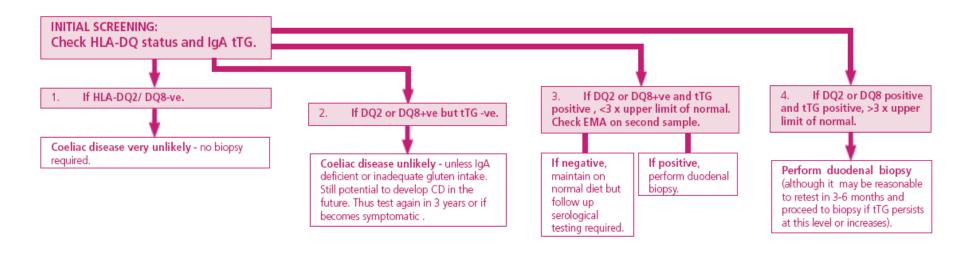


Guideline for the diagnosis and management of coeliac disease in children

Who to test

Asymptomatic children with associated conditions

With: Type 1 diabetes, selective IgA deficiency, Down, Williams, Turner syndromes, autoimmune thyroiditis, autoimmune liver disease, unexplained raised transaminases, first degree relative of coeliac patient.



Benefits

- Not all children require a biopsy
- More timely diagnosis
- Cost savings
 - » Gastroenterology
 - » Anaesthetics
 - » Day surgery
 - » Pathology



Background

Uncoordinated service



No protocols/pathways

Basic database

Inadequate dietetic support

Background



 Patients seen by 4 Consultant Gastroenterologists

1.0 WTE Gastroenterology Dietitian

4 GI clinics with wide variety of clinical conditions

Background



No consistent approach between medical staff

New coeliac patients seen out with clinics

No clinic cover if dietitian on leave

Patient questionnaire re coeliac clinic

Proposal

- Dietitians manage all patients with coeliac disease from initial referral through diagnosis and follow up to transfer
- Complex patients with coeliac disease will attend GI clinic
- Additional funding for extra dietetic hours and clerical support → business plan
- Designated clinic once fortnightly
- Education at clinics
- Comprehensive database

Initial Challenges

- Funding
- Dedicated clinic space
- Paper work associated with setting up a clinic
- Agreement from Biochemistry and Haematology to allow dietitian to order bloods
- Agreement with Out Patient clinic staff to measure height, weight and taking blood
- Agreement of all GI Consultants
- Ensuring pathway and documentation is clear
- Accessibility of medical staff if there is a clinical problem

Initial Service Development

Business plan→ additional 1wte dietitian

Competency framework for advanced role

Protocols and pathways

Database development

Dietetic Led Service

Patient/Carer Consultation

Clinic established in Glasgow in 2007

Pathways and protocols established

Advanced role for dietitians

Competency

- Extended role
- Education and training
- Competency framework
- Annual assessment
- Regular MDT meetings with Lead Clinician



Referral Criteria

Positive coeliac serology± symptoms

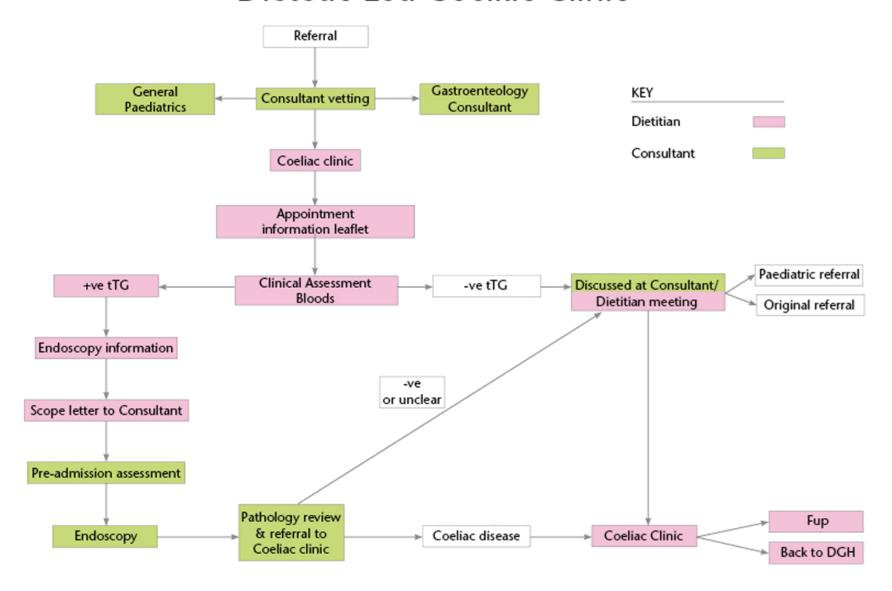
Strong family history + positive coeliac serology

Type 1 DM + positive coeliac serology

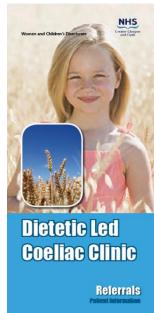
Dermatitis Herpetiformis



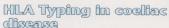
Dietetic Led Coeliac Clinic



Literature Development







There are specific blood tests used in the diagnosis of coeliac disease. They look for antibodies that the body makes in response to ceating gluten. One of these is called a tTG (Tissue Transglutaminase) antibody and you may have had a level that is higher than it should be. This shows that you may have coeliac disease, but your biopsy does not clearly suggest that you have had be compared to the coeliac disease. have this condition.

NHS

In cases like this, we can offer you a blood test which may help us find out if you have the same risk of developing coeliac disease as the general population, or if you are very unlikely to develop the condition. This test is called HLA typing.

What is HLA typing?

HLA stands for Human Leukocyte Antigen and is related to our immune system. It looks for genetic markers in our blood.

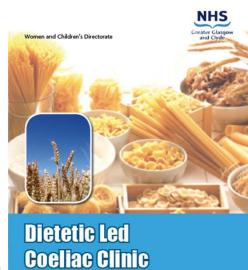
A negative HLA result shows that you are not likely to develop coeliac disease and you will not need any more

A positive HLA result will mean that further review is necessary, as you may still possibly develop coeliac disease at some point in the future.

A repeat biopsy may be necessary depending on how well

The HLA typing helps us consider the risk of coelia disease and does not look at any other conditions.

If you have any further questions, please contact the Gastroenterology Dietitians on the number: 0141 201 0846



Women and Children's Directorate Upper G.I **Endoscopy** Women & Children's Directorate



Sercenting for Goellac Discesse in Families

Coeliac disease is a lifelong condition and is an intolerance to gluten. Gluten is the protein which is found in wheat, rye, barley and

Coeliac disease does tend to run in families. Recent research has found that there is a genetic link to coeliac disease. One in ten relatives of a person diagnosed with coeliac disease may also be

We would therefore recommend that all the family are tested by your GP to find out if may have coeliac disease. This involves a simple blood test and you should discuss this with your GP. It is especially important if any of the other family members develop symptoms.

Coeliac disease is also more common if you have certain other medical conditions. These include diabetes, thyroid problems and immune problems



General Information

Teenager Information Leaflet





Womens and Children's Directorate

Coeliac Clinic - New patient referral

Please attach patient label here

Clinic Date				
Presenting Symptoms				
Family History				
Allergies				
Previous General Anaesthetic Y/N Any Difficulties Y/N Other physical problems				
Height Centile Growth: Satisfactory/Unsatisfactory Weight Centile Parental Height Mother				
Dietary Assessment				
Gluten intake Adequate/Inadequate				
Bloods taken Y/N Result Normal/Abnormal				
tTG antibodies				
Full blood count				
LFT's				
U+E's				
TFT				
PTH				
25HCC (vitamin D)				
Ferritin				
Folate				
Coagulation				
Medications				
Other relevant information				
Endoscopy Information Given Y/N				
Follow up				
Signature				

Symptoms		Comment	
Appetite	Normal	Abnormal supplies of a math	
Energy	Normal	Abnormal	
Abdo pain	none	mild moderate severe Non specific epigastric central lower Associated with defaecation Y N Nocturnal wakening Y N	
Stooling	Freq/day	Loose soft normal hard Flush away Y N Blood Y N % Perianal pair Y N Nocturnal defaecation Y N	
Rectal Prola	pse	Y N	
Abdo distens	sion	Y N	
Vomiting - Bilious - Blood	N N N		
Mouth Ulcer	s	YN	
Dental probl	lems	Y N	
Skin Problen	ns	Y N	
Bruising	Normal	Abnormal	
Nose Bleeds	N	Infrequent Frequent	
Menarche Periods	Y N Regular	rregular	
Other			
Dietitian		Date	

Coeliac Clinic

HOSPITAL

Solution of from Decimal States and Parkalah Decimal Control of States and Sta

- New Referrals and diagnoses
- Review at 3 & 6 months & annually
- Clinical assessment
- Blood monitoring
- Patients seen more frequently if concerns
- Pubertal status self assessment >10years

Securing a Diagnosis

Ensure adequate gluten



- IgA tTG's/ EMA or IgG tTG/EMA
- HLA typing
- Option of biopsy in all cases and all patients < 2 years require a biopsy

Diagnosis

Serology with positive HLA typing

Biopsy

All diagnosis confirmed in writing

Initiation of Gluten Free Diet

Within 1-2 weeks of diagnosis

See patient and relevant family members

Arrange interpreter if required

1 hour appointment slot



Coeliac Pack

- A Guide to gluten free living
- Starter pack cards from companies
- Prescribable items
- Coeliac UK information
- Clinic information
- Family screening
- Contact details













Information



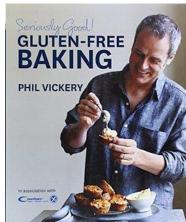












Follow Up

Telephone clinic appointment in 2 weeks

Generic email contact

Clinic review 3m, 6m, and annually

Letters to families re bloods

Review more frequently if concerns

Follow Up

- Height and Weight
- Review symptoms
- Assess compliance Patient/Carer
 - Professional
- Bloods at 6m and annually
- ? Coeliac UK members
- ? Prescription Items
- ? School/nursery

Transition

Start discussing from 14 years

See patients on their own

Encourage independence

Transfer to adult services 16 years



Transition

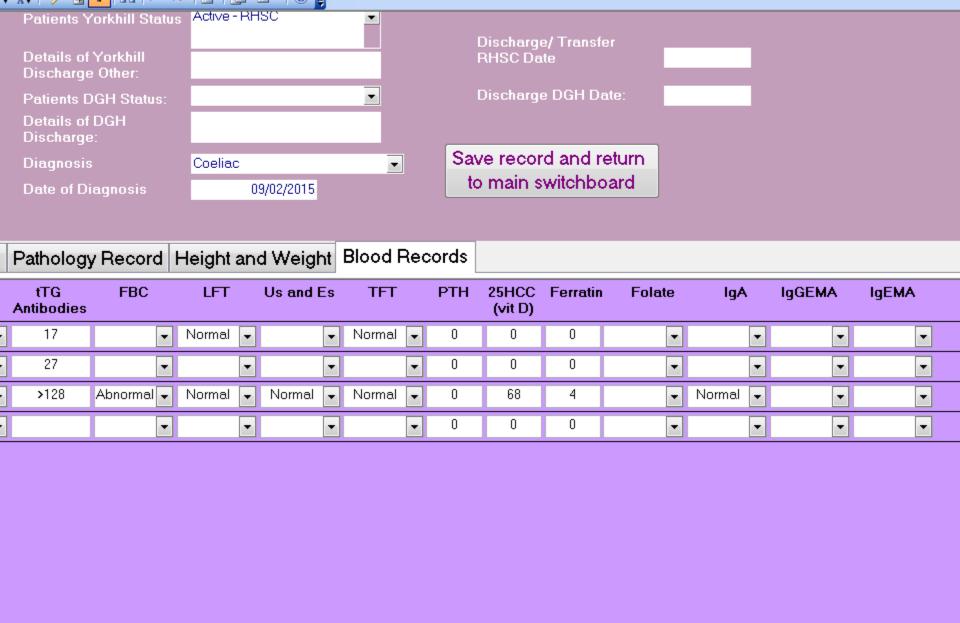
Different model in adults

Referred to Gastroenterologist & Dietitian

Dietetic review until age 19 yrs

Annual review by Pharmacy





A review of changes in presentation of Coeliac Disease within our centre and comparison with 2009 data set



H Duncan¹, E Buchanan¹, T Cardigan¹, RK Russell²
1. Department of Nutrition & Dietetics 2. Paediatric Gastroenterology Department

Length of time for tTG antibody levels to normalise following diagnosis of Coeliac Disease in a paediatric cohort



E Buchanan, H Duncan, T Cardigan¹, RK Russell²
1. Department of Nutrition & Dietetics 2. Paediatric Gastroenterology Department

Education





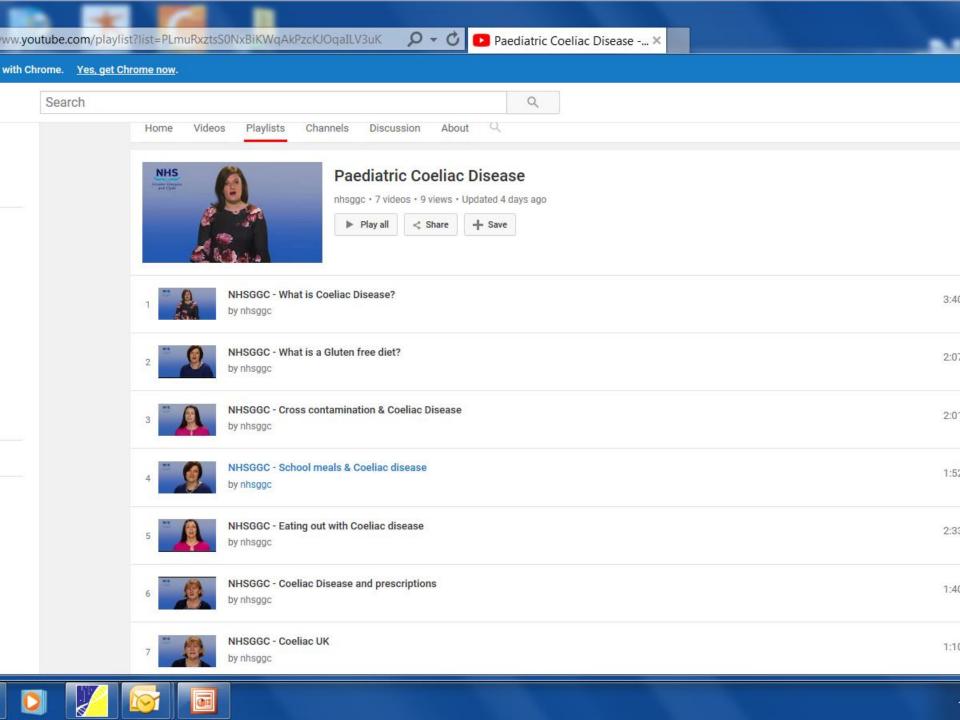
Education

 Family and Professional Education Days

 Development of videos for patient access







A DIETETIC LED COELIAC SERVICE: PATIENT AND CLINICIAN SATISFACTION

L. McKerrow, P. McGrogan, E. Buchanan

Department of Paediatric Gastroenterology, Hepatology and Nutrition, Royal Hospital for Sick Children, Glasgow, United Kingdom.

Figure 2: Satisfaction of the Dietetic Led Coeliac Service for Parents/ Carers

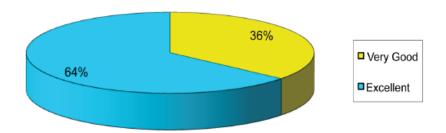
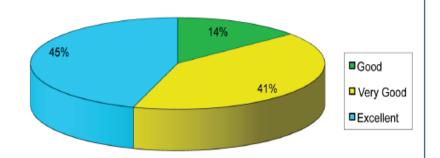


Figure 3: Satisfaction of the Dietetic Led Coeliac Service for Clinicians



Current Service

Over 275 patients

1 - 2 new referrals weekly

2 clinics weekly

 3 new patient appointments and 9 follow up appointments

Coeliac Service

Identified parents and siblings with CD

3 patients with autoimmune hepatitis

Abnormal thyroid function tests

4 patients with Crohn's disease

In Summary

- Advanced role for dietitians
- Improved patient care
- Improved equity of care across the West of Scotland
- Professional autonomy
- Unique service



