# <u>pulsimeter</u>

## Celiac disease

Celiac disease is a permanent intolerance to gluten, and causes damage to the small intestinal mucosa by an autoimmune mechanism in genetically susceptible individuals. Celiac disease is one of the most common gastrointestinal disorders in the world. It is estimated that celiac disease affects 1% of the population but 90% of these individuals remain undiagnosed.

Celiac disease was thought to be a rare malabsorptive disorder of infancy and childhood. However, it is now considered to be a common, chronic, multisystem autoimmune disorder that can present at any age when gluten is present in the diet. Awareness of celiac disease among health professionals remains poor.12 The mean delay in diagnosis of celiac disease in Canadian adults is 11.7 years. Early diagnosis of celiac disease will prevent nutritional deficiencies and may also reduce the risk of developing certain cancers and other autoimmune disorders.

Typical symptoms of celiac disease include abdominal pain, diarrhea, and weight loss. However, many individuals present with atypical symptoms including anemia (iron or folate deficiency), extreme weakness, constipation, mouth ulcers, short stature, osteoporosis, menstrual irregularities, and infertility. Additional symptoms in children include delayed growth and puberty, vomiting, irritability, and dental enamel defects.

Celiac disease is a hereditary disorder. Both first- and second-degree relatives of the person with celiac disease are at risk of developing the disease. Other high-risk groups include patients with autoimmune disorders and Down syndrome. Screening is recommended for all high-risk individuals.

Serological screening by primary care physicians of all individuals with relatives of patient with celiac disease or presenting with the following symptoms led to a 42-fold increase in the diagnoses of celiac disease:3

- Abdominal pain
- Diarrhea
- Bloating
- Constipation
- Irritable bowel syndrome
- Fatigue
- Anemia
- Abnormal liver function tests
- Infertility
- Epilepsy
- Ataxia
- · Thyroid disease
- Type 1 diabetes

Dermatitis herpetiformis (DH) is "celiac disease" of the skin. If a chronic, severely itchy, blistering rash does not respond to conventional therapy, DH should be considered. A skin biopsy will help make the diagnosis of DH and a gluten-free diet will help alleviate the symptoms.

Highly sensitive and specific serological tests are available to screen for celiac disease. The currently recommended test is the IgA-tissue transglutaminase antibody (TTG). IgA deficiency is common in celiac disease and total serum IgA level must also be measured. Patients with a positive TTG test should be referred for endoscopic small intestinal biopsy for confirmation of the diagnosis.

Celiac disease can be effectively treated by a strict, lifelong adherence to a gluten-free diet. A gluten-free diet should *not* be started before a biopsy is done, as it will affect the interpretation of the biopsy and make confirmation of the diagnosis difficult.

-Mohsin Rashid, MBBS, FRCPC, Dalhousie University, Halifax

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## Preventing sports injuries

"Each year at BC Children's, we treat nearly 500 sports-related injuries, most of which are sprains and strains," says Dr Ran Goldman, Emergency Department medical director at BC Children's Hospital. Other injuries treated at BC Children's over the spring and summer months include dehydration and heat exhaustion, fractures, repetitive and over-use injuries, as well as minor concussions.

BC Children's offers these tips to help kids and teens stay safe while playing sports this summer:

- Children should participate in sports that are appropriate for their age, skill level, and physical development. Children younger than 8 years old are not as coordinated as older children and have slower reaction times.
- Kids need to wear the right protective gear that is properly sized and fitted for them. A properly fitted and adjusted helmet should be worn when riding a bicycle, skateboarding, inline skating, or ATVing.
- · Water should be available at all times during physical activity. The amount of water needed will vary depending on the child's age, weight, the intensity of the activity, and the weather. Water is even better for kids than sports or energy drinks.
- · Warming up is important before undertaking any physical activity, even for kids. This can be as simple

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as light jogging and easy stretches to raise the heart rate and warm the muscles. After sports. it's best to walk around for a few minutes and do some stretching to cool down and get breathing back to normal.

- If your child is sick or injured, it's a good time to take a break from sports and exercise. Rest is important to healing and getting well. By returning too fast, there is a strong risk of re-injury.
- Sunscreen should be applied about half an hour before playing sports to avoid sunburn. Reapply every couple of hours or even more frequently if swimming or sweating.

It is recommended that all parents and caregivers learn first aid to know what to do should a child be injured. Information is available from HealthLink BC online at www.healthlinkbc.ca or by calling 8-1-1.

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The BCMA has already begun building on these ideas. We have garnered support from colleagues in the western provinces and we plan to propose further action at the CMA General Council in August.

By keeping the focus on quality and patient safety, and by building on our expertise and knowledge of the health care arena, physicians can continue to lead the medical system and ensure that patients receive the guidance and care they need.

-Lloyd Oppel, MD Chair, Allied Health Committee

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### bccdc

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the usage of azithromycin are clearly needed now.

Since June 2009 the BCCDC's STI Drug Order Request form has changed to reflect the concerns about azithromycin over-utilization and, when filling orders for free-of-charge STI medications, the BCCDC pharmacy has been substituting doxycycline for most of the azithromycin that has been requested. Azithromycin will continue to be first-line therapy for pre-abortion prophylaxis and, for this indication alone, azithromycin orders will continue to be filled as requested. The medical health officers of BC have given their support to this strategy.

#### **Acknowledgments**

Drs David Patrick and Fawziah Marra.

#### References

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