ISSUE 7

The Bottom Line

Vaughan Endoscopy Clinic (VEC) is a **state of the art** out-of-hospital endoscopy clinic providing **Screening colonoscopy and endoscopy** for the work up of mild gastrointestinal disorders. It is staffed by gastroenterologists**.**

In addition to the endoscopic services, they will provide all the necessary **GI follow-up** and make all the appropriate referrals required due to findings at the endoscopy.

The Medical Director has been an active participant at the CPSO in the development of **standards for out-of-hospital clinics**, all of which VEC adheres to.

Gastroenterologists:
Dr. William Appell
Dr. David Ford
Dr. Michael Gould
Dr. Susan Greenbloom
Dr. David Kreaden
Dr. Eric Leong
Dr. Michael Ostro
Dr. Ted Ptak
Dr. Jonathon Springer
Dr. Rajiv Sethi
Dr. Stephen Sinclair

In addition to high quality and convenient access to endoscopy, the Doctors at VEC will provide you with supplemental practical GI advice through this periodic newsletter. This article on Traveller's Diarrhea is written by Dr. William Appell (a gastroenterologist from Toronto East General Hospital).

Traveller's Diarrhea

Montezuma's Revenge, Turista, Aztec Two-step, Delhi Belly, Katmandu Quickstep and Mummy's Tummy are among many colourful names for this scourge of many international travelers. As winter approaches Canada, many of our patients will be escaping to warmer and more exotic destinations and be at risk for traveller's diarrhea. Although it is generally benign and self-limited it could attack up to 40% of visitors to developing countries. High risk countries include Mexico, South and Central America, Asia and Africa; moderate risks include the Caribbean and Mediterranean countries.

CAUSES

Traveller's Diarrhea is caused by ingestion of fecally contaminated food or water. 80-90% is of bacterial origin with the most common agent being enterotoxigenic Escherichia coli (ETEC). Others are Enteroaggregative E. Coli (EAEC), Campylobacter, Salmonella and Shigella. Parasitic infections may include: Giardia, cryptosporidium, cyclospora, Entamoeba histolytica, Dientamoeba fragilis. The most common virus causing symptoms is Rotavirus.

MANIFESTATIONS

Most episodes begin between 4 and 14 days after arrival and are generally self-limited to 1-5 days. Symptoms can include watery diarrhea, cramps, nausea, vomiting, anorexia, malaise and possible low grade fever. Some agents can cause bloody diarrhea, tenesmus and urgency. Some patients may develop more chronic symptoms related to a 'post-infectious' IBS.

PREVENTION

The best treatment is still prevention. Patients should be advised to take certain precautions. Avoid:

Eating foods or beverages from street vendors or where poor hygiene
Eating raw or undercooked meat and seafood
Eating raw fruits and vegetables unless you can peel them yourself

Safe beverages include bottled carbonated drinks, hot tea or coffee, beer, wine, water boiled or appropriately treated with iodine or chlorine. Remember to make sure ice for drinks is made from 'safe' water.

VAUGHAN ENDOSCOPY CLINIC

4610 Highway 7
Vaughan, ON L4L 4Y7
905 856 2626
www.vaughanendoscopy.com

VACCINATION

Dukoral is an oral, killed whole cell vaccine with the non-toxic B subunit of the cholera toxin. Two doses are taken at least one week apart and one week prior to departure. It will provide some protection against ETEC but may only prevent <25% of traveller's diarrhea.

PROPHYLAXIS

Taking a daily antimicrobial is not recommended for most patients as they promote resistance and potentially lead to adverse reactions. Prophylactic antibiotics may be considered in rare circumstances when risk of complications from an episode of traveller's diarrhea is very high. High risk patients include those with severe IBD on immunosuppressives, severe vascular, cardiac or renal disease and immunocompromised populations such as HIV and transplants. It may be acceptable in the traveller who cannot afford an illness such as travel for business meetings or weddings, as long as they understand the potential of medication adverse events.

Antibiotics used are generally quinolones: ciprofloxacin 500mg OD, norfloxacin 400mg OD. A non-absorbable agent Rifaximin may be the best agent but is not available in Canada.

Bismuth subsalicylate (Pepto-Bismol) 30cc or 2 tabs qid with meals will reduce the incidence of infection. Patients should be warned about a black tongue and black stools.

TREATMENT

Traveller's diarrhea is often a self-limited disorder without treatment. Fluid replacement is the most important component. Fluids with salt and sugar may be adequate for most cases. Pre-packaged products like Pedialyte are useful. With more severe cases Oral Rehydration Solution (ORS) is recommended. This replaces electrolytes in appropriate concentration. It can be made by adding ½ tsp salt, ½ tsp baking soda, and 4 tbsp sugar to 1 litre of clean drinking water.

Anti-motility agents such as loperamide (Imodium) and diphenoxylate (Lomotil) will reduce the rate of diarrhea by slowing gut transit time and increasing absorption. They may also improve outcome when used with antibiotics. Caution is necessary if there is bloody diarrhea or high fever.

Pepto-Bismol can also be used as treatment using 60 ml of 4 tabs q1/2hr until diarrhea resolves or 8 doses.

Antimicrobial treatment may be considered when there is frequent loose stools (>3/day) with nausea, vomiting, cramps, fever or blood. Fluoroquinolones are the drug of choice: Ciprofloxacin 500mg bid or Norfloxacin 400mg bid for 3-5 days. There is increasing resistance to these drugs particularly in S.E. Asia and for this reason, travellers to this area should be treated with Azithromycin 1gm once or 500mg for 3 days when indicated. When and if Rifaxamin is available in Canada it may be another option.

All travellers to high risk areas should be provided with an antimicrobial prior to travel and advice on when to take it.

The bottom line is:

IF SYMPTOMS PERSIST OR ARE SEVERE DESPITE ABOVE INTERVENTIONS, THE PATIENT CAN BE ASSESSED BY ONE OF OUR GASTROENTEROLOGISTS. BOTTOM LINE: ENJOY BUT BE SMART, THE BEST TREATMENT IS PREVENTION!

This newsletter will be posted on our website (www.vaughanendoscopy.com) thus your patients are able to download a copy for reference. Other GI topics of interest will be published periodically.