

# Travellers' Diarrhoea & Post Infectious Irritable Bowel Syndrome

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# Travellers' Diarrhoea (TD)

- Most common complaint of travellers
- High risk places:
  - Warm climate
  - High prevalence of indigenous infective diarrhoea
- Can affect anyone
- Most commonly caused by bacteria
  - Viruses and parasites can also cause it

# Consequences of TD

- Disruption of travel plans
- Dehydration and electrolyte imbalance
- Decreased absorption of oral medication
- Systemic infection
- Specific complications:
  - HUS
  - GBS



# Long term consequences of TD

- Post infectious irritable bowel syndrome
  - Invasive bacteria
  - Trigger the condition or exacerbate previous symptoms

# Irritable Bowel Syndrome (IBS)

- Definition
  - A GI disorder characterized by abdominal pain and altered defecation with no apparent structural or biological basis for these changes
- Symptoms
  - Abdominal pain and discomfort
  - Bloating
  - Altered bowel habits
  - Excessive wind
  - Urgency to defecate



# Post infectious IBS (PI-IBS)

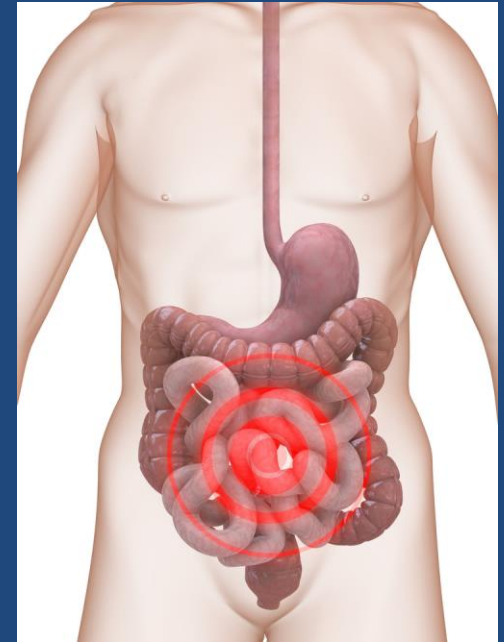
- 6-17% of IBS symptoms arose after an enteric infection
- Link first established in 1962
- Now believed
  - 5-10% of individuals who have TD go on to develop PI-IBS
  - One episode of TD increases the risk of developing IBS by 5-6 times

# Risk Factors

- Campylobacter, salmonella and shigella infections
- Severe bout of acute diarrhoea with prolonged fever
- Virulence of organism
- Individuals under the age of 60

# Pathology of IBS

- Not fully understood
- Motor function of GI tract
  - Exaggerated responses
- Visceral hypersensitivity
  - Increased sensory perceptions
  - Decreased threshold to rectal distension
- Inflammation and immune cell infiltration
  - Low level release of inflammatory mediators

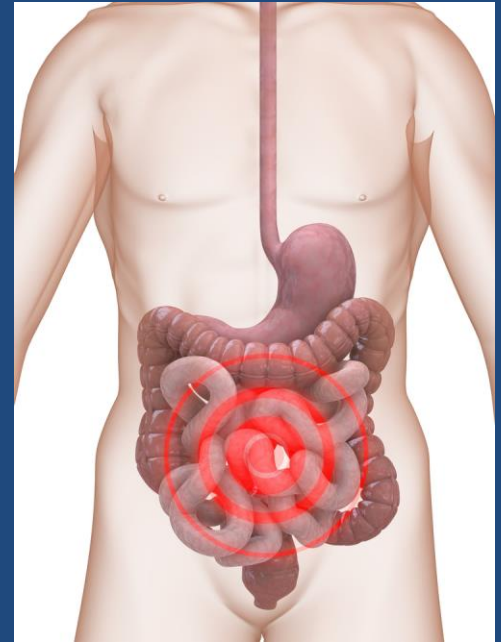


<http://www.theseanbarkesclinic.co.uk/pages/problems-we-treat/digestive-gastro-intestinal/irritable-bowel-syndrome.html#.UlezNeCD6yF>



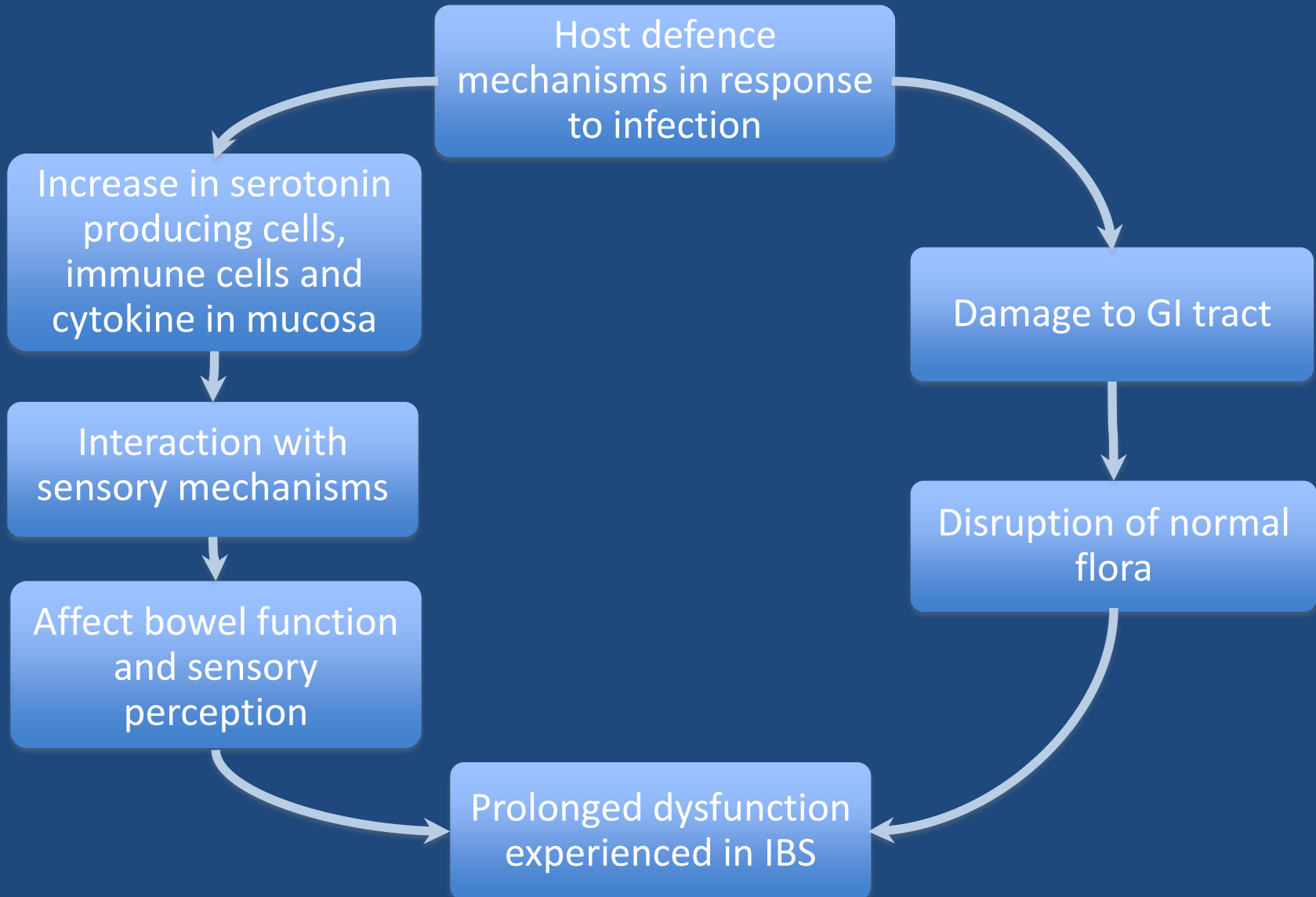
# Pathology of IBS

- Psychosocial factors
  - Affective disorders
  - Acute stress
- Genetics
  - Not sole cause
- Other theories
  - Change in gut flora
  - Changes in serotonin levels or receptors



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# How can TD cause PI-IBS?



# Importance of this link

- In 2008 Britons took 69million trips abroad
  - 10million of these outside Europe and North America
- If 60% suffer from TD
- 10% of these go to to develop PI-IBS
- Potentially could be affecting a lot of British citizens every year

# The impact of PI-IBS

- Individual
  - Life changing
  - Invasive investigations
- Society
  - Expensive investigations
  - Up to 12% of GP consultations
  - Up to 50% of gastroenterology outpatient referrals



<http://vicogon40.hubpages.com/hub/The-Individual-And-Society>

# The future...

- Chemoprophylaxis may actually increase the incidence of PI-IBS
- Could a different method of prophylaxis be developed?

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