safefood

Guide to Assessment and Management of Acute Gastroenteritis in Primary Care

PATIENT WITH DIARRHOEA +/- VOMITING (PROBABLE GASTROENTERITIS)

HISTORY

CLINICAL HISTORY

"How sick is the patient?"

- Symptoms of dehydration
- Duration/frequency of diarrhoea
- Blood or pus in stool
- Abdominal pain
- Fever
- Viral symptoms (headache, myalgia, arthralgias)
- Review of systems, particularly in children

"Is the patient at greater risk of complications?"

- Immunosuppression
- Medication
- Bowel disease or past bowel surgery

EXPOSURE HISTORY

"Where did it come from? Could this be part of an outbreak?"

- Suspicious food or water consumption (food poisoning)
- Recent antibiotics
- Recent overseas travel
- Pet or farm animal contact
- Childcare, school, nursing home, institution attendance
- Health care worker
- Known contacts or outbreak (home, wedding etc.)

TRANSMISSION RISK

"Where might it spread to? Could this be the start of an outbreak?"

- Occupation, especially food handler, health care worker
- Childcare, school, institution attendance
- Immunosuppressed contact at home
- Poor personal hygiene e.g. age, infirmity.

EXAMINATION

- Temperature, heart rate, BP, weight
- Assessment of severity of dehydration (see an appropriate table)
- GIT examination
- Other systems, particularly in children (need to exclude pneumonia, meningitis, UTI, surgical conditions etc)

Consider Haemolytic-Uraemic Syndrome in the child with bloody diarrhoea, pallor and poor urine output

INVESTIGATION

STOOL CULTURE IF

Positive Clinical Features

- Systemically unwell
- Fever over 38.5
- Duration > 3-4 days
- Severe diarrhoea leading to dehydration
- Blood or pus in stool
- Immunocompromised

Positive Exposure History e.g. recent overseas travel

High Transmission Risk e.g. child care attendance

SPECIAL REQUESTS

Laboratories test for a limited range of pathogens on routine specimens. Specific request with additional clinical details and/or direct liaison with the laboratory may be required for more comprehensive testing e.g.

- Possible outbreak (Rotavirus or Norovirus)
- Duration > 7-10 days (ova, cysts and parasites [OCP] for Giardia and Cryptosporidium)
- Suspicion of VTEC (culture for *E. coli* 0157)
- Recent broad spectrum antibiotics or hospitalisation (*C. difficile* toxin)
- HIV or immunosuppressed (discuss with lab)

MANAGEMENT

CLINICAL MANAGEMENT

Correct dehydration by fluid replacement – refer to hospital where appropriate
Continue feeding as tolerated
Limited role for anti-diarrhoeals (never in children)
Antibiotics should not be routinely prescribed

PUBLIC HEALTH MANAGEMENT BY GPs

Hand washing & hygiene advice
Exclusion, particularly food handlers & carers
Notification – by phone in cases of concern
Education and health promotion

This resource is an evidence-based, best practice guide to assessment and management of gastroenteritis in primary care. It should be used in conjunction with recognised clinical practice guidelines and adapted to the individual clinical situation.

EXPLANATORY NOTES

CLINICAL HISTORY

Acute infectious gastroenteritis is characterised by sudden onset of diarrhoea, and may be accompanied by nausea, vomiting, fever, abdominal discomfort and/or bloating. The presence of blood or pus in the stool suggests bacterial invasion of the bowel wall, and is frequently accompanied by abdominal pain and fever. Myalgia and arthralgia suggests a viral cause. People with a history of immunosuppressive disease, or on immunosuppressive drugs e.g. steroids, are at greater risk of gastroenteritis.

EXPOSURE (EPIDEMIOLOGICAL) HISTORY

The patient presenting with gastroenteritis might be part of an otherwise unknown cluster of cases in a family, institution or community, i.e. an outbreak. The question **"Could this be part of an outbreak?"** should always be considered. An exposure history is therefore essential in trying to determine a possible source of the gastroenteritis.

TRANSMISSION (PUBLIC HEALTH) RISK

Infectious gastroenteritis is a communicable disease and the potential for transmission to others should always be assessed i.e. **"Could this be part of an outbreak?"**. Food handlers with gastroenteritis pose a particular risk to the public. Settings at high risk of transmission include child care centres, schools, and other institutions.

EXAMINATION

The most common serious complication of acute gastroenteritis is dehydration, and this should be assessed using appropriate criteria. In children, acute gastroenteritis should be regarded as a diagnosis of exclusion, as vomiting and diarrhoea may be non-specific symptoms of serious illnesses like meningitis, pneumonia and surgical conditions. Consider an alternative diagnosis particularly when there is high fever, pallor, jaundice, abdominal pain with tenderness, severe abdominal pain, guarding and/or bile-stained vomiting.

INVESTIGATION

Most episodes of gastroenteritis are short lived and investigation is usually not clinically necessary. However, stool samples should be requested when the patient is clinically unwell or immunosuppressed, there is a positive exposure history or they are at high risk of transmitting the infection to others. Routine stool testing varies between laboratories and special requests are required for many organisms. Therefore, when requesting stool examination, relevant history (clinical and exposure) and the specific investigations should be written on the request form. Only one stool specimen should be requested for routine examination and viral testing, but multiple stools at different times are necessary for suspected parasitic infection.

CLINICAL MANAGEMENT BY GPs

Acute gastroenteritis is usually mild and self-limiting. Rehydration and maintenance with appropriate fluids is necessary for all patients. Continuation, or early resumption, of usual feeding in children with acute gastroenteritis can reduce the severity and duration of the illness. Hospital admission should be considered in all children under 6 months and those at high risk of dehydration (poor oral intake and prolonged vomiting and/or diarrhoea). There is absolutely no role for anti-diarrhoeal and anti-emetic drugs in children and a very limited role in adults. Anti-diarrhoeals are absolutely contraindicated in all patients with bloody diarrhoea. Antibiotics may be appropriate in patients with features suggestive of invasive disease, e.g. bloody diarrhoea, but such patients are likely to be managed in hospital.

PUBLIC HEALTH MANAGEMENT BY GPs

General enteric precautions consist of personal hygiene with hand washing and disposal or decontamination of soiled items and surfaces. Parents and patients should be educated on good hygiene and food safety practices. Patients with acute gastroenteritis should be excluded from school or work until resolution of symptoms and ideally for 48 hours afterwards. This is essential for those at high risk of transmission, including food handlers, health care workers and carers. It is a statuary obligation for GPs to notify all cases of acute gastroenteritis and/or suspected food poisoning to the local Department of Public Health in the Republic. In Northern Ireland, food poisoning is notifiable, as is gastroenteritis in children under two years of age. To enable prompt public health action, initial notification should be by telephone in those cases of particular concern e.g. possible outbreak or case of VTEC.