Campylobacter Enterocolitis

Campylobacter enterocolitis, commonly referred to as campylobacteriosis, is a bacterial infection primarily affecting the gastrointestinal tract. It is most often caused by *Campylobacter jejuni* and *Campylobacter coli*—gram-negative, spiral-shaped bacteria that inhabit the intestines of various animals, especially poultry. Transmission to humans typically occurs through the consumption of undercooked poultry, unpasteurized milk, contaminated water, or direct contact with infected animals.

Transmission

The primary mode of transmission is the fecal-oral route. Ingesting as few as 500 Campylobacter organisms can lead to infection. Common sources include:

- Undercooked or raw poultry
- Unpasteurized milk
- Contaminated water
- Fruits and vegetables washed with contaminated water
- Direct contact with infected animals or their environments

Clinical Manifestations

Symptoms typically develop within 2 to 5 days post-exposure and may include:

- Fever
- Nausea and vomiting
- Abdominal cramps
- Watery or bloody diarrhea
- Malaise

The illness usually resolves within a week; however, some individuals may experience prolonged symptoms or complications.

Diagnosis

Accurate diagnosis involves a combination of clinical assessment and laboratory investigations:

- **Patient History**: Detailed dietary and exposure history
- **Stool Culture**: Isolation of *Campylobacter* species
- **Stool Examination**: Detection of white blood cells
- **Complete Blood Count (CBC)**: To assess for leukocytosis

Advanced diagnostic methods, such as polymerase chain reaction (PCR) assays, may offer increased sensitivity and specificity.

Treatment

Most cases are self-limiting and require only supportive care

- **Hydration**: Oral rehydration solutions or intravenous fluids to prevent dehydration
- **Antipyretics**: For fever management

Antibiotic therapy is reserved for severe cases, high-risk populations, or when symptoms persist beyond a week. Recommended antibiotics include:

- **Azithromycin**: Preferred due to lower resistance rates
- **Erythromycin**: An alternative option

Fluoroquinolones, such as ciprofloxacin, are generally avoided due to increasing resistance.

Special Considerations

Antibiotic treatment is particularly indicated for:

- Severe or prolonged infections
- Pregnant women nearing term
- Immunocompromised individuals (e.g., HIV/AIDS, chemotherapy patients)
- Food handlers and childcare workers

Complications

Potential complications include

- **Reactive Arthritis**: Joint inflammation occurring after infection

- **Guillain-Barré Syndrome**: A rare neurological disorder
- **Bacteremia**: Especially in immunocompromised patients

Public Health and Reporting

Campylobacteriosis is a notifiable disease in many countries. Prompt reporting to public health authorities is essential for outbreak detection and control.

Nursing Management

Nursing care focuses on symptom management and patient education:

- **Monitor Hydration**: Assess fluid intake and output
- **Administer Medications**: As prescribed
- **Educate on Hygiene**: Emphasize handwashing and safe food practices
- **Prevent Transmission**: Implement contact precautions as necessary