Ulcerative Colitis

Randy Kinietz
Otterbein University, kinietz1@otterbein.edu
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Randall Kinietz, BSN, RN, SRNA
Otterbein University, Westerville, Ohio

Topic
Ulcerative Colitis (UC)
Chronic inflammatory disease of the large intestine, believed to be of autoimmune origin (Rubin et al., 2019)

Prevalence
• More than one million people affected each year in the United States and Europe (Rubin et al., 2019)
• About 156 to 291 cases per 100,000 people each year in the United States (Ungaro et al., 2019)
• Main onset ages 15 to 30 years old (Ungaro et al., 2019)

Signs & Symptoms
• Bloody diarrhea with or without mucus (Kayal & Shah, 2020)
• Tenesmus (Lynch & Hsu, 2021)
• Abdominal pain (McCance & Huether, 2018)
• Malaise (McCance & Huether, 2018)
• Weight loss (McCance & Huether, 2018)
• Fever, depending on severity (McCance & Huether, 2018)

Pathophysiology
• "UC is a multifactorial disorder; genetic predisposition, epithelial barrier defects, dysregulated immune responses and environmental factors play a role in its pathogenesis" (Kaur & Goggolidou, 2020)
• Inflammation of the mucousum and sub mucosal layer of the colon and rectum (Kaur & Goggolidou, 2020)
• Loci found in the lamina propria contain genes involved in autophagy, microbe recognition, lymphocyte signaling, response to endoplasmatic reticulum stress and cytokine signaling (Kaur & Goggolidou, 2020)
• These loci and the flora of the lamina propria have been found to trigger an overactive immune response in those that are susceptible, causing intestinal damage and inflammation (Kaur & Goggolidou, 2020)

Risk Factors
• Age (15-30) (Ungaro et al., 2019)
• Caucasian (Bye et al., 2017)
• Smoker (Tripathi & Feuerstein, 2019)
• Genetic predisposition/family history (Lynch & Hsu, 2021)
• Family history of cancer (Tripathi & Feuerstein, 2019)

Implications for Nursing Care
• Monitor for adverse effects from medical therapy such as pancytopenia, fever, nausea/vomiting, and nutritional deficits (Lynch & Hsu, 2021)
• Thorough discharge instructions on new medications and the importance of follow-up colonoscopies for disease process monitoring (Lynch & Hsu, 2021)

Management
• First line treatment of UC includes sulfasalazine and 5-aminosalicylates with the addition of oral or rectal glucocorticoids for those that do not experience remission within two to three weeks (Tripathi & Feuerstein, 2019)
• For cases refractory to glucocorticoids or for significant flares requiring hospitalization, the addition of anti-TNF-agents such as infliximab may be needed to control inflammation and reduce symptomology (Tripathi & Feuerstein, 2019)
• Partial or total colectomy may be needed on a case-to-case-basis (Gallo et al., 2018)
• Considerations for surgical management include (Gallo et al., 2018):  
  • Failure of medical therapy
  • Strictures
  • Perforation
  • Toxic megacolon
  • Uncontrollable bleeding
  • Cancer

References
(UC)