Familial adenomatous polyposis (FAP) is an inherited disorder that typically presents with multiple polyps in the colon. These polyps become cancerous if not monitored in the early stages or if left untreated. For those with a family history of FAP, colonoscopy screenings begin in adolescence and continue throughout adulthood because polyps can arise at an early age. Colon cancer in untreated individuals develops before age 40 years. This topic warrants discussion to aid in the prompt recognition of symptom presentation. This article will address the development of FAP, its presentation, and potential treatment strategies that may be used by nurse practitioners.

**AT A GLANCE**

- FAP is an inherited condition typified by colorectal cancer.
- Early screening and detection is imperative for prevention of colorectal cancer in individuals and families with FAP.
- Treatment with surgery and chemotherapy is required when colorectal cancer caused by FAP is detected.

**Genetic Mutations**

Two specific inherited genetic mutations are associated with the development of FAP and dictate the type of FAP: adenomatous polyposis coli (APC) and MUTYH (Lung et al., 2015). The most common genetic mutation involves APC, a tumor suppressor gene (Lung et al., 2015). Specifically, most APC mutations occur on chromosome 5 (Plawski et al., 2013). APC mutations cause unregulated cell growth and disrupt some cellular functions (e.g., cellular adhesion, cytoskeleton stabilization, apoptosis). Over time, unregulated growth promotes polypl development and transformation into cancer. APC mutations are observed in classic and attenuated FAP (Lung et al., 2015). The second type of mutation involves the MUTYH gene, which affects the ability of cells to repair oxidative DNA damage (Lung et al., 2015). The resulting cellular errors promote cell overgrowth.