Endometriosis in the sigmoid colon diagnosed by target biopsies during menstruation

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Funding: None

Conflict of interest: The authors disclose no conflicts.
**Ethical Statement:** The corresponding author, on behalf of all authors, jointly and severally, certifies that their institution has approved the protocol for any investigation involving humans or animals and that all experimentation was conducted in conformity with ethical and humane principles of research.
A 49-year-old woman presented with hematochezia for two days. One week after her menstruation, colonoscopy revealed localized wall thickening in the sigmoid colon (Figure A). Histopathology of the biopsy specimens was nonspecific. Physical examination and laboratory tests were also unremarkable. After a detailed medical interview, hematochezia was determined to coincide with her menstruation. History revealed that the first episode occurred a year ago, with intermittent episodes thereafter, lasting 2–3 days. Thus, intestinal endometriosis was suspected. A second colonoscopy performed during menstruation showed that the lesion with hemorrhagic erosion had become thicker (Figure B); endoscopic ultrasonography found submucosal thickening with the mucosal defect (Figure C, arrows). Target biopsies were taken from the erosion and histopathology revealed endometrial tissue (Figure D); hence, the diagnosis of intestinal endometriosis was confirmed, and hormonal therapy was started.

Endoscopic diagnosis of intestinal endometriosis is often uncertain as the serosa and muscularis propria are the most common sites of endometrial involvement. However, during menstruation, necrosis of endometrial tissue causes erosions in the intestinal epithelium. Therefore, targeted biopsies aid in arriving at a definitive diagnosis. It is particularly important to perform biopsies at appropriate sites, in consideration of the menstrual cycle, if intestinal endometriosis is suspected.