

**THE AMERICAN BOARD OF PATHOLOGY**  
**Maintenance of Certification (MOC) Program**



**SAM PROVIDER TOOLKIT**  
**Developing Self-Assessment Modules (SAMs)**

**[www.abpath.org](http://www.abpath.org)**

**The American Board of Pathology (ABP) approves educational providers to offer accredited AMA PRA Category 1 CME activities as SAM eligible for meeting MOC Part II requirements.**

**To become an ABP-approved SAMs provider, complete and submit the *SAM Provider Agreement* located on our website.**

**After being approved by the ABP to offer SAM eligible CME activities, follow the guidelines included here to develop your self-assessment modules and construct your annual SAMs report.**

**SAMs may be delivered in a variety of methods.**

- **online module or webinar**
- **live course or lecture**
- **annual, monthly, or weekly symposium**
- **journal article**
- **US Mail (typically slide review programs)**

**SAMs must incorporate at least one of the following ACGME core competencies in their content.**

- **Patient Care (PC)**
- **Medical Knowledge (MK)**
- **Practice-Based Learning and Improvement (PB)**
- **Interpersonal and Communication Skills (IC)**
- **Professionalism (PF)**
- **Systems-Based Practice (SB)**

**According to ACCME criteria, self-assessment modules must describe and demonstrate a comprehensive process of establishing a gap and underlying the educational need.**

**All activities offered as SAM eligible CME must be clearly denoted as such in course descriptions and on completion certificates.**

**A post-test is required for SAM eligibility. A pre-test is recommended to identify or demonstrate gaps in learned knowledge.**

- **Attendees must achieve a pass rate on the post-test set by the provider (typically 75 to 80 percent) to earn SAM credits for the course.**
- **Attendees may be allowed to take the post-test more than once in order to achieve the minimum performance level.**
- **Attendees must be provided immediate feedback including a brief explanation and reference(s) for the correct answer.**
- **Post-tests and feedback may be offered online to attendees of live courses and annual symposiums.**
- **Three to five questions per half hour of instructional time is recommended.**

**Guidelines for developing test questions:**

- **The test question should be an important concept that is medically (clinically) relevant. In addition, it should correlate to a particular learning objective, and from the pathologists' viewpoint be fair.**
- **Images or slides may be incorporated into the test questions.**
- **Where possible, questions should be written as a short clinical vignette (stem). The stem should be answerable virtually without looking at the choices. The focus should be on information of value and problem-solving rather than common knowledge.**
- **Questions should be stated as a positive rather than as a negative. Do not use stems with “except” or “none of the following”. Avoid absolutes such as “always” and “never”.**
- **Answer choices should be in alphabetical order and approximately the same length and type (there is a tendency to give more information about the correct response and therefore make it longer).**
- **Questions should generally have a “single best response” (definitive answer) and four or five “distractors” (incorrect answers). Do not use K type questions (A=1, 2, and 3 correct).**

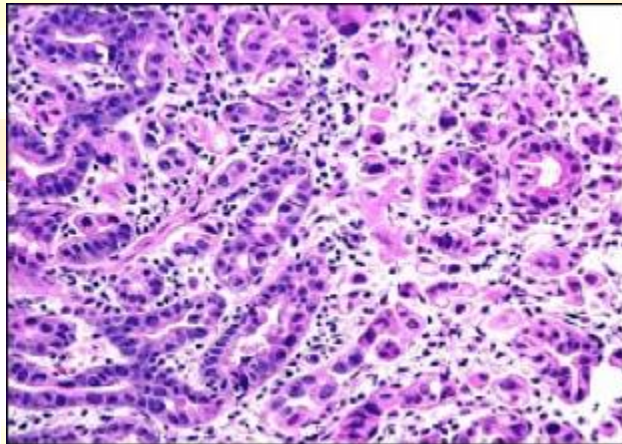
### Sample test questions:

- 1) Which of the following statements regarding Barrett's esophagus is true?
- A. A biopsy of the gastroesophageal junction with goblet cells is diagnostic of Barrett's esophagus.
  - B. Alcian blue staining is required to confirm the identification of goblet cells.
  - C. At least 2 cm of columnar-lined esophagus is required to make a diagnosis of Barrett's esophagus.
  - D. Goblet cells must be identified in a biopsy from an area of columnar-lined esophagus.
  - E. The identification of cardiac and fundic-type mucosa is sufficient to render a diagnosis of Barrett's esophagus.

**Correct answer:** D

**Explanation:** Barrett's esophagus can be diagnosed if an endoscopic abnormality is seen (columnar-lined esophagus) and goblet cells are identified in a biopsy taken from the area of endoscopic abnormality. Although cardiac and fundic-type mucosa is frequently seen in patients with Barrett's esophagus, it is not sufficient to render this diagnosis, as goblet cells are necessary. Although an Alcian blue stain will confirm the presence of acid mucin in goblet cells, this stain is not required for their identification. Intestinal metaplasia of the gastroesophageal junction seems to be a multifactorial condition which is not necessarily indicative of Barrett's esophagus.

**Reference:** Hirota WK, Loughney TM, Lazis DJ, et al. Specialized intestinal metaplasia, dysplasia and cancer of the esophagus and esophagogastric junction: prevalence and clinical data. *Gastroenterology* 1999; 116:277.



- 2) Which of the following statements is true regarding the image from a 72-year-old male with a long-standing history of Barrett's esophagus?
- A. The absence of goblet cells in the surrounding mucosa suggests a gastric tumor secondarily involving the distal esophagus.
  - B. This biopsy reveals an intraepithelial proliferation.
  - C. This lesion can metastasize to lymph nodes.
  - D. This patient is best treated by periodic endoscopy with numerous biopsies.
  - E. Up to 80% of patients with Barrett's esophagus present with this finding at initial diagnosis.

**Correct answer:** C

**Explanation:** This biopsy shows invasion of individual cells into the lamina propria, consistent with intramucosal adenocarcinoma. Although some patients with Barrett's esophagus do present with this finding, most patients have no evidence of dysplasia or adenocarcinoma in their initial diagnostic biopsy. Because there are lymphatic channels in the esophageal mucosa, this lesion can metastasize to lymph nodes. Given this fact, definitive therapy (either endoscopic mucosal resection or esophagectomy with or without ablation therapy) is required. Although goblet cells may not be found in the surrounding mucosa, adenocarcinomas can "overrun" the surrounding Barrett's mucosa such that goblet cells may not be found.

**Reference:** Sabik JF, Rice TW, Goldblum JR, et al. Superficial esophageal carcinoma. *Ann Thorac Surg* 1995; 60:896.

**3)** Which of the following statements regarding normal colon is true?

- A. Eosinophils are not a normal component of the lamina propria of the normal colon.
- B. Goblet cell density is greatest in the cecum.
- C. Lamina propria cellularity decreases from the right colon to the rectum.
- D. Normal colon shows fewer than 5 lymphocytes/100 epithelial cells throughout the entire colon.
- E. Paneth cells are a normal component of the crypt epithelium in the left colon.

**Correct answer: C**

**Explanation:** The right colon has histologic differences from the left colon. In particular, there is a progressive decrease in the lamina propria cellularity as well as a progressive decrease in the number of surface epithelial lymphocytes as one moves from the cecum to the rectum. There can be up to 10 lymphocytes per 100 epithelial cells or even more present in the right colon. The rectum also has far more goblet cells than other parts of the colon. Paneth cells can be present in the right colon but are not a normal component of the colon distal to the right colon.

**Reference:** Lazenby AJ. Collagenous and lymphocytic colitis. *Semin Diagn Pathol* 2005; 22:295.

**4)** Ulcerative colitis is characterized by which of the following?

- A. Absence of rectal involvement at presentation in adults.
- B. Features of chronicity, including basal plasmacytosis and glandular distortion.
- C. Frequent involvement of the proximal small bowel.
- D. Patchy disease in the untreated setting.
- E. Pyloric gland metaplasia is a consistent finding.

**Correct answer: B**

**Explanation:** The right colon has histologic differences from the left colon. In particular, there is a progressive decrease in the lamina propria cellularity as well as a progressive decrease in the number of surface epithelial lymphocytes as one moves from the cecum to the rectum. There can be up to 10 lymphocytes per 100 epithelial cells or even more present in the right colon. The rectum also has far more goblet cells than other parts of the colon. Paneth cells can be present in the right colon but are not a normal component of the colon distal to the right colon.

**Reference:** Surawicz CM, Haggitt RC, Husseman M, et al. Mucosal biopsy diagnosis of colitis: acute self-limited colitis and idiopathic inflammatory bowel disease. *Gastroenterology* 1994; 107:755.

**All approved SAM providers will be required to submit an annual SAMs report to ABP. This report will be requested by ABP via email at the onset of each year and must be received by April 1<sup>st</sup>. Failure to submit a SAMs report will result in suspension of SAM provider approval. SAMs report submission via email to [ABP-MOC@abpath.org](mailto:ABP-MOC@abpath.org) in Excel format is preferred.**

**Example of annual SAMs report:**

ABP-APPROVED SAM PROVIDER NAME			
NAME OF SAM ACTIVITY	METHOD OF DELIVERY	ACGME COMPETENCIES	# CREDITS
Molecular Biomarkers in Breast Cancer: How Do We Best Get to the Truth?	annual symposium	MK	2.50
2015 CPIP-D Case 04 - Special Considerations for Neonates	online module	MK, PB, SB	1.25
Multidisciplinary Hematopathology Conference	weekly symposium	PC, MK, PB, IC, PF, SB	1.00
Practical and Effective Diagnostic Hematopathology	live course	PC, MK, PB, IC, PF, SB	5.00
Latest Developments in Forensic Pathology and Forensic Toxicology	journal	MK, PB	13.00
2015-2016 Glass Slides Subscription A	US mail	PC, MK, PB	16.00

**ACGME competencies:**

<b>PC</b>	PATIENT CARE
<b>MK</b>	MEDICAL KNOWLEDGE
<b>PB</b>	PRACTICE-BASED LEARNING AND IMPROVEMENT
<b>IC</b>	INTERPERSONAL AND COMMUNICATION SKILLS
<b>PF</b>	PROFESSIONALISM
<b>SB</b>	SYSTEMS-BASED PRACTICE