



# Writing Items for the ABR

Content Editing Division

# Item Objectives

## **Focused**

- Each item should focus on one concept.

## **Clear**

- Each item should be straightforward, easy to interpret, and unambiguous.

## **Concise**

- Each item should include only information necessary to answer the question.

# Item Components

- Stem = Background + situational information + images/diagrams/tables + question
- Options = **KEY** (correct answer) + 3 or 4 **DISTRACTORS** (incorrect answers)

4 or 5 total options per item are preferred  
3 options are acceptable for items with only 3 plausible choices

# Acronyms

- Clarity in content; no chance of misinterpretation
- The ABR has a list of acronyms that are acceptable to use without expansion.
- If an acronym is not on the list, spell it out on first use.
- Example: Instead of **ML**, use **mediolateral (ML)**.

# Stem Attributes

- Linear delivery of information
- Complete, clear question
- Focus on a single concept
- Positively worded format
- Objectively worded structure

# Linear Delivery of Information

Background + situational information + request for answer

A 7-year-old girl is treated for . . .

+ One year later, she presents with . . .

+ What is the most appropriate next imaging exam?

Cases should be written in present tense, when possible.

# Linear Delivery of Information

Background + situational information + request for answer

## INCORRECT:

What is the most likely diagnosis for a patient with rapid weight gain who presents with abdominal distention 6 weeks after receiving abdominal irradiation for hepatobiliary cancer?

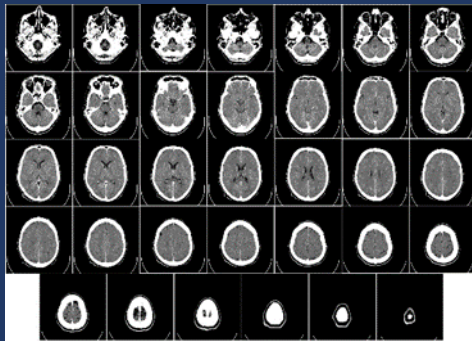
## CORRECT:

A patient with hepatobiliary cancer is treated with abdominal irradiation. Six weeks later, he presents with abdominal distention and rapid weight gain. What is the most likely diagnosis?

# Linear Delivery of Information

Linear examples without extensive patient history:

A patient presents with a headache and visual auras. **What is the most appropriate treatment?**



**What is the most likely diagnosis?**





# Complete, Clear Question

Stems should be complete sentences ending with a question mark.

## INCORRECT:

- Carcinoma:
- In women, carcinoma is usually:

## CORRECT:

- In women, what is the most common site of carcinoma?

Why? Because the stem has to pass the “cover test.”

# Complete, Clear Question

What is the “cover test”?

If options are covered, the stem should have sufficient information for the diplomate to predict the answer without having to look at the option list.

# Focus on a Single Concept

If asked:

Which of the following patients is most likely to have presented with chest pain?

-or-

Patients with Paget disease typically have:

Could you predict the correct answer if the options were covered?

# Focus on a Single Concept

Unfocused stem (with mixed options):

What is true about ventricular aneurysms?

- A. Stent placement is most appropriate. (treatment)
- B. The most common cause is transmural myocardial infarction.\* (etiology)
- C. Most patients present with hypotension. (presentation)
- D. It is most often seen in patients less than 50 years of age. (prevalence)

# Focus on a Single Concept

**The key from the previous example:** The most common cause is transmural myocardial infarction.

**New stem:** What is the most common cause of ventricular aneurysm?

- A. Ischemic stroke
- B. Transmural myocardial infarction\*
- C. Essential hypertension
- D. Genetic anomaly

# Positively Worded Items

- Items should ask for the correct answer, not the incorrect answer.
- Avoid negatively worded items:
  - They do not pass the cover test.
  - Negatively worded items should only be used for adverse events, differential diagnoses, or techniques that could cause harm.

For example:

Which of the following should be **EXCLUDED** from the differential diagnosis?

What medication should **NOT** be used in men who are being treated with nitrates?

# Objectively Worded Items

All items should be objectively written, based on fact and not opinion.

## **INCORRECT:**

A patient is referred to you from an outside hospital for evaluation of hemoptysis. Based on his CT findings, what would you do first?

## **CORRECT:**

A patient presents with hemoptysis. Based on the CT findings, what is the most appropriate next step?

# Option Attributes

- Same category
- Same part of speech
- Similar in length and structure
- Plausible to some degree
- Supported by medical research
  - At least one credible reference is required to support the key.



# Same Category

**INCORRECT:** Mixed options

Patients with multiple myeloma commonly have which of the following?

- A. Complete response with induction chemotherapy (treatment response)
- B. Fever on presentation (presentation)
- C. Thrombocytopenia with thalidomide (treatment response)
- D. Initial presentation with bone pain (presentation)

# Same Category

Create two focused items:

- In patients with multiple myeloma, what is the rate of complete response after induction chemotherapy?
- What is the most common presenting symptom of patients with multiple myeloma?

# Same Part of Speech

The options should all be in the same part of speech. For example:

What is the most appropriate next step in management?

## **INCORRECT:**

- A. Obtain a radiograph
- B. Performing MRI
- C. Observation
- D. The patient should be sent home.

## **CORRECT:**

- A. Radiography
- B. MRI
- C. Observation
- D. Discharge

# Similar Length and Structure

A pediatric patient presents with colloid cysts. What is the most appropriate treatment?

- A. Surgery to relieve hydrocephalus and decrease the risk for clinical status deterioration\*
- B. Antibiotics
- C. Compression
- D. Fine-needle aspiration

# Plausible to Some Degree

- A feasible option for consideration by the unprepared or underprepared diplomate
- A rational and logical *wrong* answer the diplomate might guess if no choices were provided
- A real thing; no invented terms or phrases

# Things to Avoid

- Multiple and overlapping parts
- Overlapping numerical ranges
- Pairs

# Multiple and Overlapping Parts

**INCORRECT:**

The carcinoma shown is most likely to metastasize to what organ(s)?

- A. Lungs
- B. Lungs and heart\*
- C. Lungs, heart, and brain
- D. Kidneys

# Multiple and Overlapping Parts

**CORRECT:**

The carcinoma shown is most likely to metastasize to the **lungs** and what other organ?

- A. Heart\*
- B. Brain
- C. Pancreas
- D. Kidneys



# Overlapping Numerical Ranges

What is the overall survival after adjunctive chemotherapy?

## INCORRECT:

- A. 5% to 10%
- B. 10% to 15%
- C. 15% to 20%
- D. 20% to 25%
- E. 25% to 30%

## CORRECT:

- A. < 5%
- B. 5% to 10%
- C. 15% to 20%
- D. 25% to 30%
- E. > 30%

# Pairs

## INCORRECT:

A 35-year-old man presents with a sudden, severe headache. What is the most appropriate initial imaging?

- A. Unenhanced CT\*
- B. Contrast-enhanced CT
- C. MRI
- D. Radiography

# Pairs

**CORRECT:**

A 35-year-old man presents with a sudden, severe headache. What is the most appropriate initial imaging?

- A. Unenhanced CT\*
- B. Contrast-enhanced CT
- C. MR angiography
- D. MR venography

# Summary

- Keep it focused
- Make it linear
- Use complete sentences and end with a question
- Ask for the correct answer
- Keep options balanced and similar
- Spell out acronyms and abbreviations

# Item Writer Resources

- Item Format Reference Sheet – quick overview of ABR item format
- Accepted Acronyms and Abbreviations
- Item Writers' Guide – in-depth reference with detailed instructions and additional examples

These resources and a copy of this presentation are available from your exam developer.  
Also, feel free to contact Editing if you have any questions.



Thank You!

Questions? Contact Editing staff at [Editing@theabr.org](mailto:Editing@theabr.org)