



# 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?

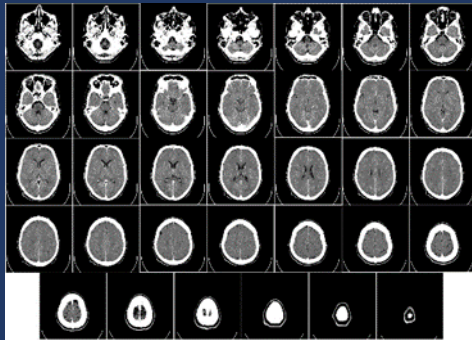
## CORRECT:

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 test-taker 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 test-taker
- A rational and logical *wrong* answer the test-taker 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)