



Constructing case-based, multiple-choice questions for CME activities

The purpose of writing a case-based, multiple-choice question for a CME activity is to measure the learner's application of knowledge based on the desired results and learning objective(s) of the activity.

Include

- A clear link between the question and the learning objective of the activity
- Five response options (1 preferred response and 4 plausible distractors)
- Response options of similar length

Avoid

- Negative questions such as "all of the following except"
- Multiple answers in the options. For example: "both B and D" or "A, B, and C."
- True/false response option
- Response options of "none of the above" or "all of the above"
- Vague words such as "rarely," "occasionally," or "frequently."
- Absolutes such as "always" and "never"

Example

The following is an example of a case-based, multiple-choice question written for a CME activity.

Learning Objective:

Recognize the signs of malignant lesions in pediatric patients.

Question:

A 12-year-old boy presents to the clinic for evaluation of a tender, enlarging skin growth on his right lower leg over the past 3 years. His pediatrician diagnosed him with a wart and has been unsuccessfully treating the lesion with cryotherapy. A skin biopsy demonstrates squamous cell carcinoma.

Which element of the child's medical history would most raise the level of suspicion for a squamous cell carcinoma?

- A. large congenital melanocytic nevus
- B. Langerhans cell histiocytosis
- C. early onset of acne
- D. long term voriconazole use**
- E. neurofibromatosis type I

Correct Answer: D

Question Element:

→ **Stem (Clinical Vignette/Case)**

→ **Lead-in (Question)**

→ **Response Options
(4 distractors, 1 preferred response)**

→ In selecting the correct answer, the learner has recognized a sign of malignant lesions in pediatric patients. The learning objective has been met.