

# Making the Most of Your UWorld QBank

First, activate your UWorld account

- Use the code provided by SOM
- Locate your Dashboard homepage
- If your code does not work:
  - Email UWorld for a new code
  - Contact Dr. Clifford if no new code is assigned



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# Making the Most of Your UWorld QBank

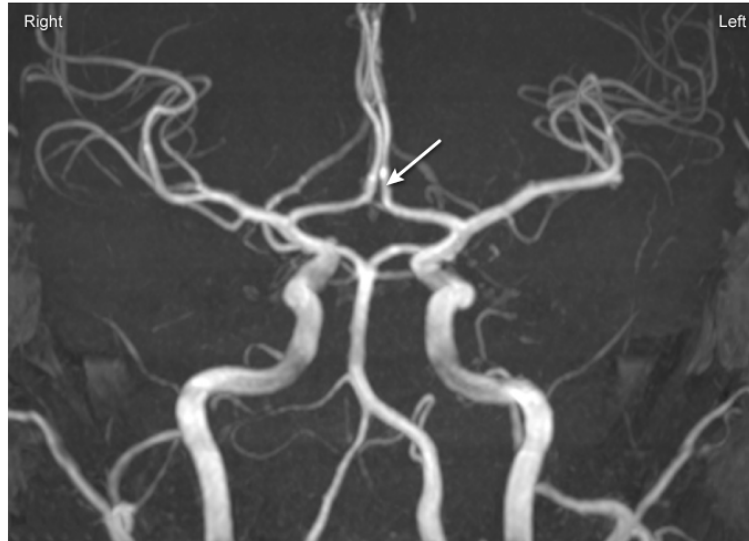
## What is the Purpose of using your UWorld QBank?

- Hone your test-taking skills
- Recall practice with distractors (wrong answers)
- Frequent, low-stakes testing
- Identify areas for Content Review
- Customizable by subject/system
- Track your progress, globally and within quizzes



# Honing Your Test-Taking Skills

A 68-year-old man is evaluated for visual loss in the left eye that resolved spontaneously within several hours. The patient has a history of hypertension, type 2 diabetes mellitus, coronary artery disease, and ischemic cardiomyopathy. He has smoked a pack of cigarettes daily for the past 40 years. Physical examination reveals a left carotid bruit but no neurologic deficits. A carotid duplex ultrasound shows 85% stenosis of the left internal carotid artery, and carotid angiography with stenting is performed. During the procedure, atherosclerotic debris embolize to the artery shown (white arrow) on the cerebral magnetic resonance angiogram below.



Which of the following actions is most likely to be impaired in this patient as a result of the embolization?

- (A) Climbing stairs
- (B) Gripping
- (C) Speaking
- (D) Swallowing food
- (E) Whistling

As you open a new question, form a plan of attack:

- What is the question asking?
- What information in the vignette is relevant?
- Which strategy is best for you:
  - Reading the vignette first
  - Reading the answers first
  - Reading the question sentence first?



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# Honing Your Test-Taking Skills

For this question, most of the information in the vignette is in fact irrelevant. This question asks if you know which regions of the homunculus are supplied by the anterior cerebral arteries!

Which of the following actions is most likely to be impaired in this patient as a result of the embolization?

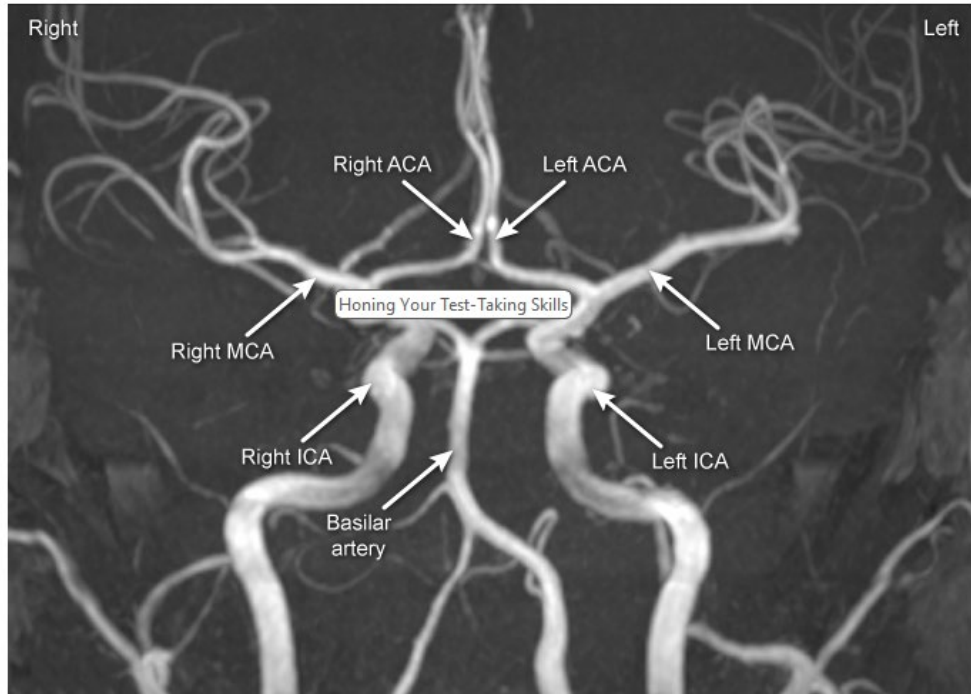
- (A) Climbing stairs
- (B) Gripping
- (C) Speaking
- (D) Swallowing food
- (E) Whistling



# Honing Your Test-Taking Skills

## Use the Question Explanation:

### Normal cerebral MR angiogram



ACA = anterior cerebral artery; ICA = internal carotid artery; MCA = middle cerebral artery.

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This cerebral magnetic resonance angiogram shows a 3D reconstruction of the [circle of Willis](#), with the top representing superior regions and the bottom representing inferior regions. The internal carotid arteries are the large vessels seen bilaterally near the center of the image. Each gives off a middle cerebral artery to supply lateral brain regions and an [anterior cerebral artery](#), which extends medially and then superiorly. Each anterior cerebral artery supplies the [medial region](#) of the ipsilateral hemisphere, from the frontal pole to the parietooccipital sulcus.

Occlusion of the anterior cerebral artery would affect sensory and motor function of the [contralateral leg and foot](#) while predominantly sparing the contralateral arm/face ([cortical homunculus](#)). Patients with bilateral anterior cerebral artery occlusion can also develop significant [behavioral symptoms](#) (eg, abulia) and [urinary incontinence](#) if the frontal micturition center (eg, medial frontal lobe/cingulate gyrus) is affected.

**(Choices B, C, D, and E)** Occlusion of the middle cerebral artery would affect motor control of the hand (eg, gripping), face/mouth (eg, whistling), and throat (eg, swallowing) out of proportion to the leg. It can also result in Broca aphasia (due to damage of the dominant frontal lobe), anosognosia and spatial neglect of the contralateral side (due to damage of the nondominant parietal lobe), conjugate gaze deviation toward the side of the stroke, and contralateral homonymous hemianopsia (due to damage of the optic radiations in the subcortical temporoparietal lobe).

#### Educational objective:

The anterior cerebral arteries supply the medial portions of the 2 hemispheres (frontal and parietal lobes). Occlusion can cause contralateral motor and sensory deficits of the lower extremities, behavioral changes, and urinary incontinence.

## Interrogate the Question:

- What do you need to know to get this correct?
- Does the correct answer make sense?
- Do the incorrect answers make sense?

Use the Links and the Educational Objective to guide any content review you need

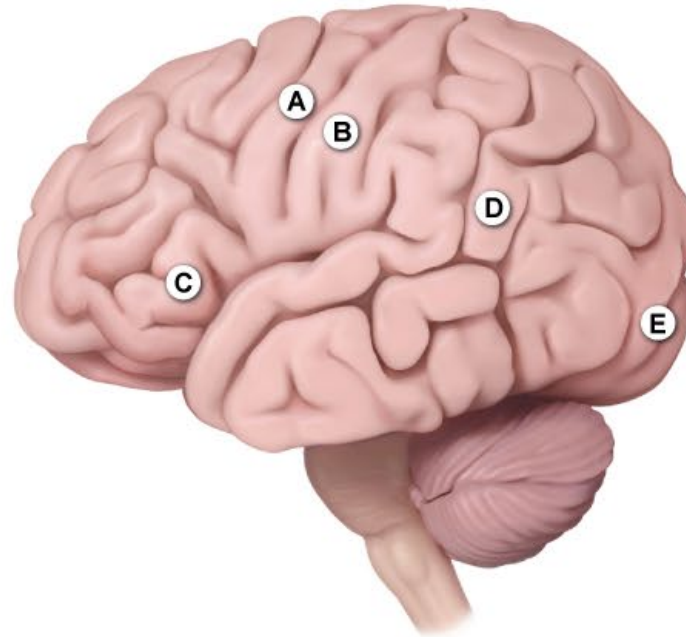


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# What to Do if You Do Not Know the Answer

A 65-year-old man is brought to the emergency department due to an acute change in mental status. The patient was having dinner with his family when he suddenly had difficulty using his fork and appeared confused. Other medical conditions include type 2 diabetes mellitus, hyperlipidemia, and hypertension. The patient is a high school calculus teacher and has a 40-pack-year smoking history. Blood pressure is 180/98 mm Hg and pulse is 98/min and regular. On physical examination, the patient is well oriented, answers questions appropriately, and has no motor, sensory, or visual deficits. He is unable to add simple numbers such as 17 plus 9; he is also unable to recognize or distinguish his fingers. Which of the following brain areas is most likely affected in this patient?

Think of the vignette as an argument in favor of one answer in particular



Which of these answers has the best support for it in the vignette?



# What to Do if You Do Not Know the Answer

The Question Explanation reveals the logic behind the correct answer (D):

This patient has had a stroke but has no motor, sensory, or visual deficits. However, he has trouble eating, solving simple mathematical problems (despite being a calculus teacher), and identifying his fingers, which are all tasks requiring **multisensory integration** (eg, visual-spatial, tactile, proprioceptive). The **parietal association cortex** is the brain region responsible for processing this information, and facilitates comprehension (eg, understanding words & symbols) and problem solving (eg, numerical calculation, spatial orientation).

This patient's particular pattern of deficits is suggestive of injury involving the **angular gyrus** of the **left (dominant)** parietal lobe. Damage to this region classically results in **Gerstmann syndrome**, which is characterized by the following signs:

- Agraphia (inability to write)
- Acalculia (inability to solve mathematical calculations)
- Finger agnosia (inability to identify individual fingers on the hand)
- Left-right disorientation



Link these functions to brain regions – which region makes the most sense?

Although Gerstmann syndrome may occur as an isolated syndrome, lesions to the angular gyrus may also be associated with alexia (inability to read) and aphasia (impaired speech), also tasks that require multisensory integration.



# What to Do if You Do Not Know the Answer

The Question Explanation also reveals the logic behind the incorrect answers:

**(Choice A)** This area just anterior to the central sulcus is the precentral gyrus (primary motor cortex). Lesions to this area would result in contralateral weakness according to the [somatotopic organization](#) of the brain.

**(Choice B)** This area posterior to the central sulcus is the postcentral gyrus (parietal *somatosensory* cortex). A lesion here would cause sensation loss in the contralateral body.

**(Choice C)** This location in the caudal part of the inferior frontal gyrus of the dominant hemisphere is Broca area. A stroke in this area leads to an expressive aphasia. Although patients with expressive aphasia may have difficulty writing, speech would also be impacted (usually characterized by nonfluent speech).

**(Choice E)** A lesion to the visual cortex, located in the occipital lobe, can lead to cortical blindness or visual impairment.

**Educational objective:**

Because the parietal association cortex integrates multisensory information, damage can lead to difficulties in comprehension and problem-solving in the absence of motor or sensory deficits. Specific injury to the angular gyrus classically results in Gerstmann syndrome (agraphia, acalculia, finger agnosia, and left-right disorientation).

You need to know only enough to regionalize specific activities mentioned in the vignette!

Some reasoning clues that might help:

- A & B were placed to orient you to the Central Sulcus
- C & E were placed far from related areas OR areas prone to stroke





# Frequent Low-Stakes Testing

## The “**Testing Effect**”:

Frequent practice & testing, provided with feedback, when impact on grade is minimal lead to increased memory retention

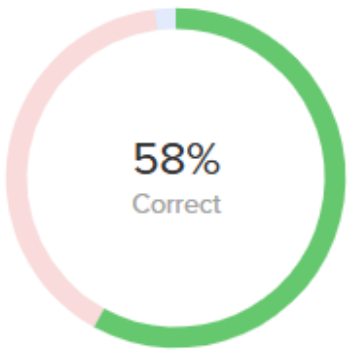
- Using your QBank to make frequent, small quizzes will improve your recall of the material AND
- The feedback from question scoring, answer explanations, and educational objectives will allow you to track progress and highlight areas for review

Here’s a good [study](#) to follow up if interested:

Sotola, L. K., & Crede, M. (2021). Regarding class quizzes: A meta-analytic synthesis of studies on the relationship between frequent low-stakes testing and class performance. *Educational Psychology Review*, 33(2), 407–426.



# Identifying Areas for Content Review



## Top Three ⓘ

Hematology & Oncology  
Allergy & Immunology  
Rheumatology/Orthopedics & Sports

## Bottom Three ⓘ

Microbiology (General Principles)  
Infectious Diseases  
Biostatistics & Epidemiology

## Overall

Assignments Submitted: 276  
Questions Answered: 5641  
Percent Correct: 58%

Your main dashboard will suggest content areas as you use your QBank more and more

Be careful not to put too much stock into the overly broad statistics

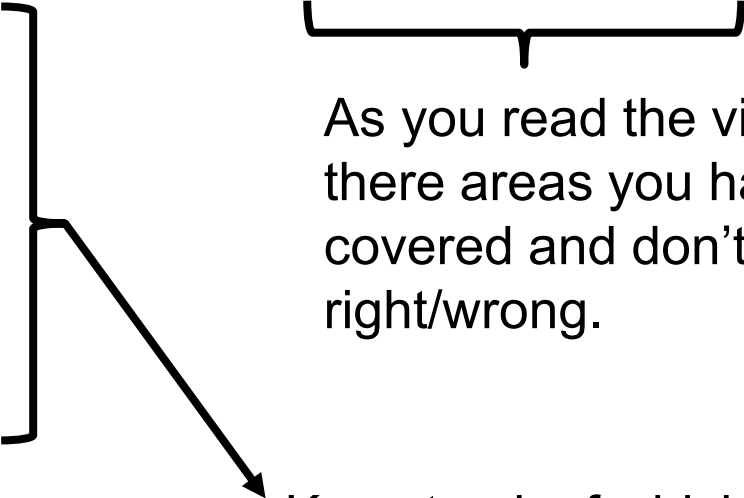
→ You may want to “reset” your QBank statistics when you begin Dedicated Study



# Identifying Areas for Content Review

A 61-year old woman comes to the office due to insomnia. She has had difficulty falling asleep since her divorce was finalized 2 months ago and she relocated to a new state to be closer to her daughter and grandchildren. The patient's sleep is restless and she is frequently awakened by household noises. During this time, she has also felt anxious and tense. The patient is overwhelmed by financial worries and the responsibilities of living on her own. Although previously outgoing, she now avoids opportunities to meet new people and socializes only with her daughter. The patient has no psychiatric history but does have a history of hypothyroidism treated with levothyroxine. Physical examination is unremarkable. TSH is 1.6  $\mu\text{U}/\text{mL}$ . Which of the following is the most likely diagnosis?

- (A) Acute stress disorder
- (B) Adjustment disorder
- (C) Anxiety disorder due to a medical condition
- (D) Generalized anxiety disorder
- (E) Medication-induced anxiety disorder
- (F) Normal stress response



As you read the vignette, track how well you know the content – are there areas you have not covered yet? Are there areas you have covered and don't understand fully? Move beyond the binary of right/wrong.


Keep track of which answers are familiar and which are not – these are good sources for new flashcards, concept maps, recall practice, &c.




# Identifying Areas for Content Review

Correct Answer:

B

 Average Time ⓘ  
41 Seconds

 National Percentage Correct ⓘ  
69 % of Students

## Explanation

This patient developed anxiety symptoms in the setting of a recent stressor (eg, divorce and relocation); the absence of previous anxiety and brief duration make **adjustment disorder** the most appropriate diagnosis. Adjustment disorder involves emotional or behavioral symptoms (eg, anxiety, depression, disturbance of conduct) developing **within 3 months** of an **identifiable stressor** and lasting no longer than 6 months once the stressor or its consequences ceases. Symptoms in an adjustment disorder must be **distressing** and **impairing** (eg, this patient seeks medical attention for insomnia and is socially isolative) but are insufficient to meet full criteria for another mental disorder.

**(Choice A)** In acute stress disorder, the symptoms of re-experiencing (ie, intrusive memories and flashbacks), avoidance, negative mood, dissociation, and hyperarousal last from 3 days to 1 month following a life-threatening traumatic event. This patient's symptoms do not meet the criteria for this disorder, and her stressor is not life-threatening.

**(Choices C and E)** Although untreated thyroid conditions and excessive doses of levothyroxine may cause mood and sleep disturbance, this patient's hypothyroidism is adequately controlled, as evidenced by her normal TSH level.

**(Choice D)** Although anxiety, tension, and poor sleep are symptoms of generalized anxiety disorder, this diagnosis requires that symptoms last  $\geq 6$  months.

**(Choice F)** A normal stress response is differentiated from an adjustment disorder by milder symptoms, lack of marked distress, and lack of social or occupational impairment. This patient's significant distress and impairment make adjustment disorder the correct diagnosis.

### Educational objective:

Adjustment disorder involves emotional or behavioral symptoms occurring within 3 months of an identifiable stressor. The diagnosis is indicated when the patient has significant distress and impairment but does not meet full criteria for another mental disorder.

Interrogate the Answer Explanation (correct answers and incorrect ones) and the Educational Objective similarly – What would improve your knowledge of this content?



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# Tracking Your Progress

## **Move beyond “right vs. wrong” dynamic & look for other feedback:**

- Keeping track of time in Tutor Mode can be a gauge of improvement
- Track questions for which you quickly know the answer – how is this number changing?
- Gradually increase question difficulty for practice quizzes



# Making the Most of Your UWorld QBank



← Schedule a meeting with a Learning Specialist:

- Guided MCQ Analysis
- Step 1 Study Plan
- Mastering Block 6

Access resources on the Learning Specialist webpage: →

- Time management
- Memory enhancers
- Guidance on Block exams & Board exams



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