



Stroke alert

● Quick identification of stroke in a postpartum patient yields positive result.

By Linda DeLuca, MSN/Ed, RN-BC, and Maureen Gianna, RN-BC

ANNA CONNER, a 30-year-old woman, is admitted to the medical-surgical unit with a diagnosis of pneumonia. Her vital signs are stable (blood pressure [BP] is 103/74 mm Hg, pulse is 104 beats per minute [bpm], and respiration rate [RR] is 20 breaths/minute). Ms. Conner reports that she occasionally experiences hypoglycemia and that her appetite is good. Her fasting blood glucose level is 87 mg/dL.

Patient history

Ms. Conner is 5 months postpartum, and she had a dilation and curettage 2 months ago for irregular vaginal bleeding. Before admission, Ms. Conner tested positive for the flu and was treated at home with oseltamivir. Most of her flulike symptoms subsided except for increasing shortness of breath, cough, and nasal congestion, which prompted a visit to the emergency department where she was found to be hypoxic and dehydrated. A left lower lobe infiltrate was identified on the chest x-ray, and Ms. Conner was admitted and placed on I.V. fluid replacement and antibiotics. She is alert and oriented and her gait is steady.

Taking action

Maria, Ms. Conner's direct-care nurse, leaves briefly to answer a colleague's question. When she returns, Ms. Conner is standing by the bed and the left side of her face is drooping. Maria immediately pages the rapid response team (RRT), announcing a stroke alert.

When the emergency code cart arrives, Maria places Ms. Conner on the cardiac monitor and begins to assess her using the FAST exam (Facial drooping, Arm weakness, Speech difficulties, Time to call for help). The American Heart Association recommends use of this mnemonic to help identify signs and symptoms of a stroke.

To assess for unilateral weakness evidenced by drooping of one arm, Maria lifts both of Ms. Conner's arms and asks her to hold them up. Maria identifies left-sided arm weakness. Ms. Conner is unable to answer questions, such as "Do you know where you

are?" indicating expressive aphasia. When a pen is held up in front of her, Ms. Conner is unable to identify it, and her speech is incoherent.

Ms. Conner's vital signs are BP 111/89 mm Hg, pulse 90 bpm, RR 20 breaths/minute, and temperature 98° F (36.7° C). To rule out hypoglycemia, the patient care technician performs a fingerstick glucose. The result is within normal limits (94 mg/dL).

When the RRT, which includes a neurologist, nurse practitioner, rapid response physician, and critical care nurse, arrives, Maria reviews the patient's history and recent events. After additional assessment by the neurologist, Ms. Conner is taken for a computed tomography (CT) scan. When no blood is noted on the CT scan, an ischemic stroke is suspected and tissue plasminogen activator is administered.

Recovery period

After the CT scan, Ms. Conner returns to the medical-surgical unit, and her husband arrives. As Maria reviews the situation with Mr. Conner, the patient begins to speak coherently and can identify objects. Ms. Conner is transferred to the intensive care unit for closer observation. One week later, she's discharged home with no neurologic deficits.

Lessons learned

Women remain in a hypercoagulable state for up to 1 year postpartum, placing them at risk for a stroke. Both stroke and hypoglycemia can present with visual and speech disturbances, hemiparesis, and confusion, which is why a glucose level was obtained for Ms. Conner. And subtle changes in vital signs can indicate either condition. Fortunately, Maria's rapid assessment of her patient's condition and her quick response resulted in a positive outcome. ★

Visit <http://www.americannursetoday.com/stroke-alert> for a list of selected references.

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