

Transcript

# Signs of Sepsis in Patients With Dementia

By Quality Insights

Posted March 28, 2023

## Description

---

What are signs of sepsis caregivers should be looking for, and how do these signs differ in patients with cognitive impairment like dementia? Quality Insights' Christopher Henry sits down with us to explain.

Christopher Henry RN, MSN, NHA, is a Quality Improvement Specialist for West Virginia nursing homes and the Charleston Partnership for Community Health. He can be reached at [chenry@qualityinsights.org](mailto:chenry@qualityinsights.org).

## Recording Transcript

---

**Voiceover:** Signs of Sepsis in Patients With Dementia: A conversation with Christopher Henry.

**Cathy Caudill:** Hello and welcome to our podcast. I'm Cathy Caudill, a communications specialist with Quality Insights, the Quality Innovation Network-Quality Improvement Organization for West Virginia and Pennsylvania.

I'm here today with Christopher Henry, who is the Quality Improvement Specialist for West Virginia Nursing Homes and the Charleston Partnership for Community Health. Christopher is a Master's prepared nurse who has been in healthcare for over 30 years. He has served in various healthcare leadership roles from Assistant Director of Nursing, Director of Nursing and as a Nursing Home Administrator.

Welcome, Christopher, and thanks for joining us today to discuss sepsis, particularly concerning dementia and other cognitively impaired patients. Please tell our audience what exactly sepsis is.

**Christopher Henry:** Thanks for that question, Cathy. Sepsis occurs due to an infection – and without early intervention, it can become life-threatening.

When you have an infection, your body's natural response is to fight that infection. But if your immune system has an overwhelming response to the infection, your body can develop inflammation and trigger sepsis.

Any infection in the body can lead to sepsis. It's common for infections to begin in the bladder, lungs, skin, urinary tract, or muscles.

**Cathy:** Who is at risk of developing sepsis?

**Christopher:** Anyone can develop sepsis. There's a myth is that sepsis is rare and only affects people with pre-existing conditions, and that's just not the case. Everyone is at risk.

But there *are* some people who are at higher risk. This includes:

- People who have had sepsis previously
- People who have been recently hospitalized
- People who are age 65 or older
- People with weakened immune systems
- And people with chronic medical conditions, such as cancer, lung disease, or kidney disease

There's also a myth that sepsis cases are only found in the hospital setting. But studies have found that 87% of cases originate *outside* hospitals. So a patient presenting to the E.R. may be more advanced in the infection process.

**Cathy:** Is there a way to prevent sepsis?

**Christopher:** The best way to stop infection from progressing to sepsis is through infection control, like proper hand washing.

It's also essential to make sure patients are up to date with their vaccinations any time you engage with them. Vaccinations prevent diseases that can cause infection, like influenza, shingles, and some types of pneumonia.

Finally – when an infection *does* occur – the best way to prevent sepsis is by recognizing the infection early on and starting treatment immediately.

**Cathy:** What are the signs of sepsis?

**Christopher:** There are a number of signs that could be a symptom of sepsis. One helpful tool for remembering the signs is the acronym TIME, which stands for Temperature, Infection, Mental Decline, and Extremely Ill.

Starting with T – Temperature – It can be a sign of sepsis if it's higher or lower than expected.

For I – Infection – it can be a sign of sepsis or infection if the patient has a low-grade fever or a change in behavior.

For M – Mental Decline – signs of sepsis can be sleepiness, confusion, difficulty to rouse, or another change in behavior

And for E – Extreme Illness - signs that can be related to sepsis are severe pain, discomfort, or shortness of breath.

**Cathy:** Are the signs of sepsis the same for patients with dementia?

**Christopher:** Patients with cognitive issues like dementia aren't always able to tell you when they are unwell or have pain, so it's even more imperative that we watch closely for these signs.

And this comes with some challenges. Oftentimes, patients with cognitive impairment won't allow staff to take their temperature with a thermometer. Instead, you should watch for other signs, like skin being warmer to the touch than usual, dryer skin than usual, a flushed face or lips, or shivering when it's warm. And don't forget that a lower-than-normal temperature can also be an indication of sepsis.

Another tell-tale sign of an infection is a change in behavior, like increased confusion, agitation, a personality change, or drowsiness. This is a crucial area to watch when dealing with mentally-impaired patients. An infection can cause the patient to become drowsy and want to sleep more than usual. It can also cause a patient who is usually calm to become agitated or aggressive.

One of the most memorable patients I cared for in the long-term care setting was a lady who was always pleasant with the staff. In a matter of days, she became very agitated and started screaming at the staff. We discovered the cause was a urinary infection.

Body language is a good indicator of whether someone is feeling pain of pain, like crying, moaning, restlessness, or grimacing. You should also watch for more subtle indications of discomfort, like guarding of a body part or eating less than usual.

Pain can also affect mobility – so falling, difficulty balancing, or even being unwilling to move can all be signs of an infection.

Finally, we should be watching for signs of respiratory infection. Coughing, wheezing, and shortness of breath can be signs of pneumonia or a seasonal infection.

If sepsis is suspected, it should be handled as an emergency by calling 911 or going to a hospital. Urgent response and rapid, aggressive treatment increase the chances of survival.

**Cathy:** Can Sepsis cause dementia?

**Christopher:** Studies have found evidence that sepsis *can* cause dementia. One study from 2010 suggested at least 20,000 new cases of dementia are caused by sepsis each year.

In another significant study from 2017, researchers looked at first-time sepsis patients admitted to the hospital with no history of dementia. They found that the sepsis patients were more likely to develop dementia after discharge.

They also found that being younger did not lower a patient's risk for developing dementia. Instead, patients were at greater risk for developing dementia based on how long and how severe the sepsis case was – regardless of age.

It's also important to note that – in some cases – a patient might have already had dementia but it had gone unnoticed. Oftentimes, caregivers only realize there was a problem *after* the septic occurrence. In these instances, the sepsis or septic shock can worsen the dementia or even reveal symptoms that weren't apparent before the illness. After the sepsis is treated, the people with early-onset dementia will recover back to their baseline, but the changes noticed are still present.

**Cathy:** Do patients with dementia or cognitive impairment have an increased risk of dying from infections that cause sepsis?

**Christopher:** A limited amount of research has been done in this area. But a 2015 study did find that patients with C.O.P.D. had a higher risk of dying if they also had dementia.

Overall, sepsis increases morbidity and mortality whether or not a patient has dementia. According to the World Health Organization, there are 30 million cases of sepsis each year worldwide, and each year at least 6 million people die from it.

**Cathy:** Thanks for sharing this valuable information with those caring for dementia patients. Is there anything else you would like to share with our audience today?

**Christopher:** I want to remind everyone that we can't prevent *all* sepsis cases. Sometimes infections aren't detected, and sometimes infections don't respond well to treatments. So it's even more critical to know what to watch for in mentally impaired patients.

When caring for any patient, remember the acronym TIME, which we discussed earlier. It's even more critical when dealing with those who have altered cognition. The earlier we recognize sepsis and treat it, the better the outcome can be for the people we care for.

**Voiceover:** If you would like to contact Christopher Henry, you can reach him at [chenry@qualityinsights.org](mailto:chenry@qualityinsights.org). You can check out our other interviews at [qualityinsights.org/qin/multimedia](http://qualityinsights.org/qin/multimedia).

### Podcast Disclaimer

---

This material was prepared by Quality Insights, a Quality Innovation Network - Quality Improvement Organization under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. Publication number 12SOW-QI-GEN- 12SOW-QI-GEN-040323-CC