Wife in a Coma After Cardiac Arrest

Families' FAQ: “Can Zolpidem, hyperbaric oxygen or stem cells help?” | Quick tip for families in intensive care

A husband's wife suffered a cardiac arrest two weeks ago and is in a coma with global brain ischemia. She is breathing on her own and has intermittent limb movement. He has found three possible treatments (Zolpidem, hyperbaric oxygen and stem cells) and asks whether they can help. Here is what families in this situation need to know.

Q. What is global brain ischemia?

When the heart stops, blood flow to the brain stops and neurons begin dying within minutes if circulation isn't restored. Global brain ischemia is this widespread injury from lack of oxygen. Recovery can take weeks, months and, in documented cases, longer. The key is not giving up too early and making sure every possible intervention is on the table.

Q. Are there any positive signs in her case?

Yes, and they matter. **Breathing on her own** means the brainstem, which controls basic functions, is intact. **Intermittent limb movement** suggests brain activity beyond the vegetative level. **No cardiac, lung or organ problems** means her body is strong enough to support recovery. The ICU team may be working from a prognosis based on the first 72 hours, so ask whether these two-week signs are being fully counted.

Q. Can Zolpidem help?

Zolpidem is a sleeping tablet (Stilnox/Ambien). Case reports and small studies, including a famous 2000 case, show some patients with disorders of consciousness, including hypoxic-ischemic injury, wake up temporarily on low doses, possibly by releasing suppressed but functional brain circuits. **Limits:** not a standard ICU protocol, response varies and effects are often temporary. The author says a short trial is low-risk and worth raising. Ask: *“Has a Zolpidem trial been considered? What is the team's position?”*

Q. Can hyperbaric oxygen therapy (HBOT) help?

HBOT means breathing 100% oxygen in a pressurized chamber (1.5 to 3 times normal pressure). Studies suggest it may promote neuroplasticity, reduce inflammation and “wake up” dormant neurons in the ischemic penumbra, with some improvements in consciousness and motor function. **Limits:** evidence is mostly observational or small trials, it is not standard of care for this in Australia, needs a referral to a hyperbaric unit, and she must be stable enough for transport. Ask whether she is a candidate.

Q. Can stem cell therapy help?

This is the most emerging option. Animal studies and early human trials suggest stem cells can reduce neuroinflammation and release growth factors, and active trials exist in the US, China and Europe. **Limits:** not standard care; most treatment outside trials is unregulated, expensive and unverified. Be very careful with overseas clinics making sweeping promises. The right path is a legitimate clinical trial (search ClinicalTrials.gov) or a major academic center with a documented research program.

Q. What else should we raise with the ICU team?

Targeted temperature management (if not started, ask why); **neurostimulation** (tDCS, median nerve stimulation); **amantadine**, which has helped functional recovery in traumatic brain injury and has been trialled in hypoxic-ischemic injury; **structured sensory stimulation** (voice, touch, music) from family and nurses; and **early neurological rehabilitation input**, requested now, not at discharge.

Q. Which records do we need, and why?

Get **all** records from the arrest to today: resuscitation records (no-flow and low-flow time), CT and MRI brain, EEG reports, neurological assessments (GCS over time, pupils, documented movement), blood gases, lactate and glucose results, and the current medication list (is anything suppressing consciousness?). Without them you can't advocate effectively. Families who have records and ask informed questions get different outcomes from families who are passive.

Q. What if she recovers but can't be fully weaned from ventilation?

Some patients regain consciousness but need long-term ventilation. **Intensive Care at Home** (Australia's only third-party accredited intensive care at home nursing service, ISO 9001:2015, NDIS registered) supports adults and children on tracheostomy ventilation, NIV/BiPAP/CPAP, PEG or NG feeding, complex medication management and palliative care at home, funded through NDIS, TAC or privately. It also helps families in the USA, Canada, UK and India.

Q. What is the honest bottom line?

There is legitimate scientific reasoning behind all three treatments. None is guaranteed, and none should be dismissed, especially with positive signs two weeks after arrest. What helps most now is someone who knows the ICU from the inside to review records, ask the hard questions and find out what hasn't been tried.

Need independent expert advocacy? Intensive Care Hotline can help.
Patrik Hutzel brings 25 years of critical care nursing experience. We review records in plain language, explain the real prognosis, identify options the ICU team may not have raised, prepare your questions, hold consulting calls with the ICU team and help with second opinions. Book a **free 15-minute consultation**. **intensivecarehotline.com** | support@intensivecarehotline.com | **intensivecareathome.com**

General information for families, not a substitute for advice from your loved one's treating medical team.