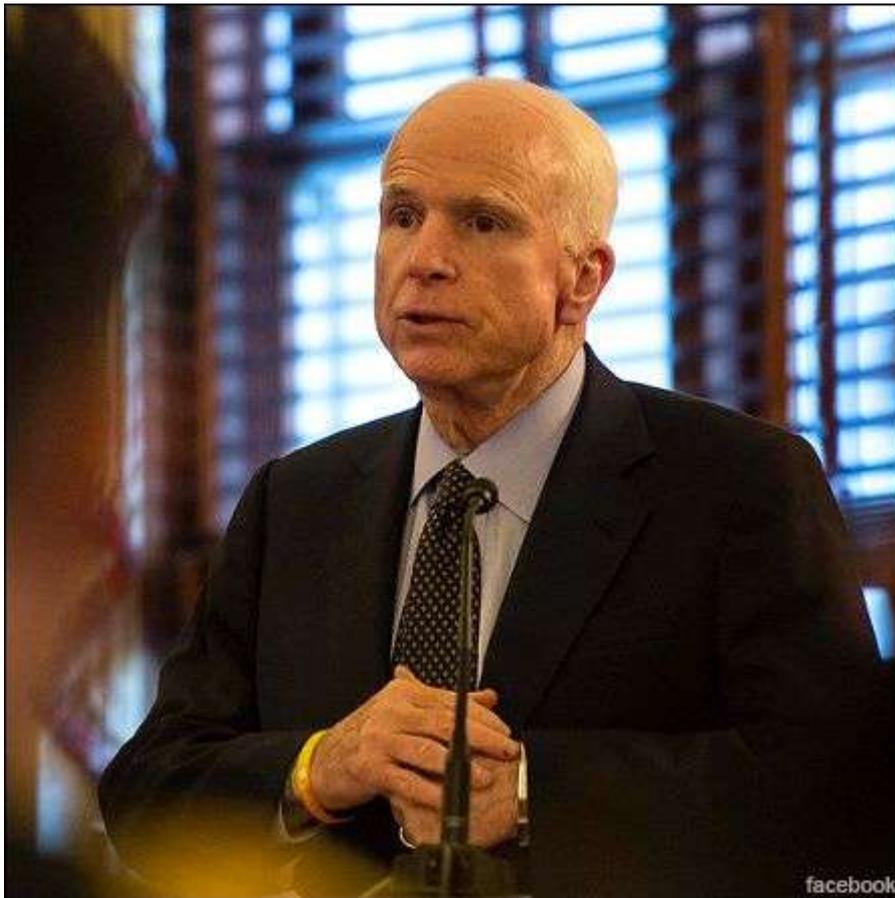


## Arizona Sen. John McCain's Glioblastoma Diagnosis

07/27/2017 10:25 pm ET Updated Aug 02, 2017



**By Dr. Sudip Bose, MD, FACEP, FAAEM**

It's pretty rare that I see someone with symptoms like those of Arizona Sen. John McCain, who went into the hospital last week to have what his docs diagnosed as a blood clot above his left eye removed. It's the same side of the senator's face where he had several surgeries to remove patches of melanoma – a type of skin cancer that if not treated can be deadly. Sen. McCain had his melanoma taken care of and all was good. But his doctors were in for a surprise when they saw the blood clot and abnormal tissue above it. The lab confirmed what the doctors suspected and Sen. McCain learned not only did he have a blood clot, but he also had primary glioblastoma, a very aggressive type of brain cancer. It is the most recent blow to a man who has had a history stretching back some 50 years to the Vietnam War of having to fight through some very serious physical ailments.

It's not often that I encounter a situation in the ER where I'm diagnosing a glioblastoma, but when I'm presented with a serious condition like that in the ER, it's immediately humbling and I have instant empathy for the patient. It's not easy to deliver a diagnosis like that. You want to be as positive as possible, but you also understand the reality of what your patient is facing. The statistics are daunting.

Glioblastoma, or GBM, tumors are usually highly malignant. The tumor cells usually reproduce very quickly and are fed by a large network of blood vessels. The American Brain Tumor Association says, "Because these tumors come from normal brain cells, it is easy for them to invade and live within normal brain tissue."

Treatment can help, but the condition can't be cured. Statistically, with this kind of tumor, survival rates beyond a year and a half are uncommon. Median survival time upon first diagnosis of GBM is in the 14- to 16-month range. There are some longer-term survivors, but this type of cancer is an aggressive form, and it's usually more extensively present in the brain than the initial diagnosis indicates.

A GBM tumor typically begins as a small area tumor, often microscopic. It spreads through healthy brain tissue, displacing it and causing pressure. The spread of the tumor also can cause hemorrhaging in the brain. Surgery is usually an initial first step, but surgeons generally understand that while they may take out the visible tumor, they suspect they're leaving behind microscopic parts of the tumor or cells, which will grow rapidly. Because GBM tumors have finger-like tentacles, they are very difficult to completely remove. And with brain cancers, there's a limit to the amount of tissue you can resect.

Radiation and chemotherapy usually are used in conjunction with surgery, but this type of cancer is very tricky to treat. The American Brain Tumor Association says, "Glioblastoma can be difficult to treat because the tumors contain so many different types of cells. Some cells may respond well to certain therapies, while others may not be affected at all. This is why the treatment plan for glioblastoma may combine several approaches."

Surgery alone is not a cure for GBM. Radiation also will not cure, and the tumors are chemotherapy-resistant as well. So even with the best conventional treatment combining surgery, radiation and chemotherapy, the long-term survival for patients and general outlook is not good. Unfortunately, like pancreatic cancer, it's one of the worst cancers to be diagnosed with and despite aggressive treatment, almost always returns.

As I mentioned before, this is not Sen. McCain's first run-in with cancer. McCain, now 80, was treated for melanoma, a serious skin cancer, several times previously, initially in 1993. He had other melanoma diagnoses in 2000 and 2002. He had surgeries to remove the cancerous tissue each time, which left the Vietnam War veteran with a disfigured left cheek, but he survived the cancer. The GBM diagnosis has no relation to those previous skin cancers.

Sen. McCain is a survivor, having lived through 5½ years of hell as a prisoner of war in Vietnam. He was shot down in 1967 in a jet he was flying and ejected, breaking his right leg around the knee, his right arm in three places and his left arm. He was captured by the North Vietnamese and survived the mis-treatment and lack of treatment of his injuries, as well as general torture as a POW, and shows the effects today, limping and with limited use of his

right arm. You think, if anyone can get through something like this diagnosis of glioblastoma, it would be him.

But the odds are certainly against Sen. McCain this time. For those diagnosed with primary glioblastoma at his age, there's less than a 4 percent survival rate beyond 5 years. Unfortunately, this type of cancer cannot be defeated even by a fighter like Sen. McCain, who was near death a number of times in some 50 years ago in Vietnam. There are those who survive war, survive being shot down in a jet fighter in enemy territory like McCain. But we all face the ultimate equalizer at some point in our lives – death. It's sad, but it's the cycle of life. Americans in general have a hard time accepting that idea. But it happens to us all eventually.

Optimism does help, however. I've seen it at work myself as a doctor. It can help keep people going in the face of daunting odds. A woman I know got a similar GBM diagnosis when she was half McCain's age. With the help of modern medicine, doctors and her sheer will to live, she hung on for almost 10 years. But in the end, she knew she couldn't beat it. So she put her affairs in order, laid out a plan for her two high school-age children, planned her funeral, said her goodbyes and drifted away. Another woman I know got this diagnosis and made it for almost two years. She was in her late 50s and her children were grown and beginning their own independent lives after graduating college. There was a photo of her on Facebook, taken with her husband, sitting outside on their lawn furniture indulging in a guilty pleasure of having a fast food burger with fries and a shake. She died a few days later.

We never know when it's our time. One day it's a burger and fries and a seemingly normal life being lived, another day ...

When you get a diagnosis like Sen. McCain has gotten, it becomes very clear that you know what you need to focus on – family, friends, relationships – the truly important things that will solidify memories in the minds of your loved ones. Sadly, it's that time in life for Sen. John McCain. Who knows how much longer he has – six months, a year, 18 months perhaps? But I think we saw a little of that kind of recognition yesterday from Sen. McCain in his speech on the floor of the Senate.

“I have been a member of the United States Senate for thirty years. I had another long, if not as long, career before I arrived here, another profession that was profoundly rewarding, and in which I had experiences and friendships that I revere. But make no mistake, my service here is the most important job I have had in my life,” he said. “And I am so grateful to the people of Arizona for the privilege – for the honor – of serving here and the opportunities it gives me to play a small role in the history of the country I love.”

And later, towards the end of his speech, he said, “It's a privilege to serve with all of you. I mean it. Many of you have reached out in the last few days with your concern and your prayers, and it means a lot to me. It really does. I've had so many people say such nice things about me recently that I think some of you must have me confused with someone else. I appreciate it though, every word, even if much of it isn't deserved.

“I'll be here for a few days, I hope managing the floor debate on the defense authorization bill, which, I'm proud to say is again a product of bipartisan cooperation and trust among the members of the Senate Armed Services Committee.

“After that, I’m going home for a while to treat my illness. I have every intention of returning here and giving many of you cause to regret all the nice things you said about me. And, I hope, to impress on you again that it is an honor to serve the American people in your company.

“Thank you, fellow senators.

“Mr. President, I yield the floor.”

[https://www.huffpost.com/entry/arizona-sen-john-mccains-glioblastoma-diagnosis\\_b\\_597a9feae4b09982b7376369](https://www.huffpost.com/entry/arizona-sen-john-mccains-glioblastoma-diagnosis_b_597a9feae4b09982b7376369)