

# [The danger of the encephalitis](https://assignbuster.com/the-danger-of-the-encephalitis/)

[Science](https://assignbuster.com/essay-subjects/science/), [Biology](https://assignbuster.com/essay-subjects/science/biology/)

﻿The Danger Of The Encephalitis
Based on the available data, encephalitis and anaphylactic shock from the tetanus toxoid was the most likely cause of the man’s death. One reason is that tetanus toxoid can cause encephalitis with symptoms similar to those experienced by the man (“ Encephalitis,” 2010). Another reason is that it could not have been bacterial encephalitis from the catfish fin because the poison from the fin is usually not associated with granulocytosis except for a subtype called paraneoplastic limbic encephalitis, which is actually non-bacterial in origin (Pelosof & Gerber, 2010).
However, before the man could have been successfully diagnosed, other essential information should have been obtained first. For a suspected case of encephalitis based on the symptoms, treatment should be specific for the particular cause of encephalitis (“ Encephalitis Treatment,” 2008). This means to say that before the man in the case study was given medication, a differential diagnosis should have been conducted first. Moreover, in a suspected case of infection, the organism that caused the infection should have been indentified first (“ Encephalitis and Meningitis,” 2011). Aside from these information, the patient should have been tested first for a possible allergic reaction to tetanus toxoid for the allergic reactions to this medication are lethal and may even cause encephalitis (Gaublomme, n. d.; “ Encephalitis,” 2010). Allergic reactions to tetanus toxoid are common among those with a history of hay fever, asthma, or other allergies (Gaublomme, n. d.). These and other information about the man’s medical history should have been obtained first before he was given tetanus toxoid.
References
“ Encephalitis and Meningitis.” (2011). Encephalitis and Meningitis Index. Retrieved Nov. 19, 2011 from MedicineNet. com: http://www. medicinenet. com/encephalitis\_and\_meningitis/article. htm
“ Encephalitis Treatment Overview.” (2008). Brain & Nervous System Health Center. Retrieved Nov. 18, 2011 from WebMD: http://www. webmd. com/brain/tc/encephalitis-treatment-overview
“ Encephalitis.” (2010). Diseases and Conditions. Retrieved Nov. 11, 2011 from the National Institutes of Health: http://www. ncbi. nlm. nih. gov/pubmedhealth/PMH0002388/
Gaublomme, K. (n. d.). “ Tetanus Toxoid Vaccination.” Vaccination. Retrieved Nov. 11, 2011 from Science Direct: http://www. whale. to/v/tetanus. html
Pelosof, L. C. & Gerber, D. E. (2010). “ Paraneoplastic Syndromes: An Approach to Diagnosis and Treatment.” (2010). Mayo Clinic Proceedings. Retrieved Nov. 11, 2011 from the MayoClinic: http://www. mayoclinicproceedings. com/content/85/9/838. full
Possible Treatment for the Man and Treatment for the Platelet Recipient
First of all, the man in the case study should have been diagnosed properly, especially with possible allergies to tetanus toxoid, which was the most likely cause of his death through encephalitis (“ Tetanus,” 2011). Moreover, tetanus toxoid could have caused the anaphylactic shock that the man experienced prior to his death (“ Tetanus,” 2011). The cause of his death could not have been a negative interaction between Ceftriaxone and the tetanus toxoid because these two drugs do not have any known harmful interaction (“ Drug Interactions,” 2011).
Moreover, a thorough history and examination of the patient is necessary in order to make sure what exactly the cause of the disease is (“ Encephalitis and Meningitis,” 2011). Additionally, since most cases of encephalitis are viral and that the disease occurs only once for every 200, 000 people in the United States alone, then it is necessary to provide antiviral medications instead of antibacterial ones like Ceftriaxone (Lazoff et al., 2011). Antiviral medications include acyclovir and foscarnet (“ Encephalitis,” 2010). The side effects of tetanus toxoid which the man experienced included titanic spasms, hyperventilation, inability to swallow and death through anaphylactic shock (Gaublomme, n. d.). These side effects could have been reduced by acetaminophen and the doctor should have been informed immediately (“ Tetanus Toxoid,” 2011).
Now, about the recipient of the man’s platelets, the most likely result would be a case of “ transfusion-transmitted bacterial contamination” or TTBI, or perhaps a transfusion-transmitted viral contamination, since viral encephalitis is more common than the bacterial type (Zia et al., 2011). In such a case, treatment would involve performing a bacterial culture from the recipient and if the bacteria grown from the recipient’s blood matches that of the donor, then a definite contamination is expected (Zia et al., 2011). The patient should then be started on empiric parenteral antibiotics until the cause of the infection is specified, and chlorhexidine or iodine must be used to disinfect the venipuncture site (Zia et al., 2011). Otherwise, if the disease the recipient will experience is neither bacterial nor viral in origin, then he should be treated accordingly and subjected to more tests.
References
“ Drug Interactions between Adacel (Tdap) and ceftriaxone.” (2011). Interactions Checker. Retrieved Nov. 17, 2011 from Drugs. com: http://www. drugs. com/drug-interactions/adacel-tdap-with-ceftriaxone-910-12288-557-0. html
“ Encephalitis and Meningitis.” (2011). Encephalitis and Meningitis Index. Retrieved Nov. 19, 2011 from MedicineNet. com: http://www. medicinenet. com/encephalitis\_and\_meningitis/article. htm
“ Encephalitis.” (2010). Diseases and Conditions. Retrieved Nov. 11, 2011 from the National Institutes of Health: http://www. ncbi. nlm. nih. gov/pubmedhealth/PMH0002388/
Gaublomme, K. (n. d.). “ Tetanus Toxoid Vaccination.” Vaccination. Retrieved Nov. 11, 2011 from Science Direct: http://www. whale. to/v/tetanus. html
Lazoff, M., Hemphill, R. R. & Pritz, T. (2011). Encephalitis.” Encephalitis. Retrieved Nov. 11, 2011 from MedScape: http://emedicine. medscape. com/article/791896-overview
“ Tetanus Toxoid Injection Side Effects.” (2011). Drugs & Medications. Retrieved Nov. 18, 2011 from WebMD: http://www. webmd. com/drugs/drug-52860-Tetanus+Toxoid+Inj. aspx? drugid= 52860&drugname= Tetanus+Toxoid+Inj
“ Tetanus.” (2011). Diseases and Conditions. Retrieved Nov. 18, 2011 from RxList. com: http://www. rxlist. com/tetanus-drug. htm
Zia, M., Taha, H. M., & Smith, C. (2011). “ Transfusion-Transmitted Bacterial Infections.” Diseases and Conditions. Retrieved Nov. 19, 2011 from Medscape: http://emedicine. medscape. com/article/1389957-overview#aw2aab6b3