

Gentien's illness and how he died. Written by Sonali Advani, MD, MPH; who is trained in the medicine and pediatric infectious diseases. Based on her analysis of the documents and reports from Pierre and Diana, Pierre's assertion "that Gentien died of complications due to the illnesses that he suffered whilst a refugee in Europe" may not be true. Gentien could have possibly suffered from tubercular meningitis

Tuberculosis (TB) is caused by a bacterium known as *Mycobacterium tuberculosis*. The primary infection affects the lungs and is usually mild. This seems to have been caught when the family was at Yaoande in Jan 1943. Tuberculosis is endemic in the Cameroons. All three- Diana, Gentien and Hélène might have suffered from the primary lung infection at that time. Diana thought it was whooping cough but once it is unlikely, as the family reported history of whooping cough infection on the ship to Africa, and repeat infections within a short time span are uncommon due to immunity from the previous infection.

About 90% of those infected with *Mycobacterium tuberculosis* do not have symptoms (latent TB infections). The bacteria enter the lungs, most times form a Ghon's focus which can be dormant for many years. However, in some cases, the disease may become active within weeks after the primary infection. There is about a 10% lifetime chance that the latent infection will progress to active tuberculous disease.

Tuberculous meningitis occurs when localized infection escalates within the lungs, with dissemination to the regional lymph nodes like the ones described in the back of Gentien nose, and further spreads to the brain. The duration of this illness can range from 1 day to 9 months with a waxing and waning course, so that Gentien's intermittent periods of recovery are consistent with the course of the disease. The diagnosis of TBM cannot be made or excluded solely on the basis of clinical findings, however findings of headache, stiff neck and altered mental status strongly suggest meningitis. Diana said on the 1st April 1943 that she "was terrified of Meningitis as it is prevalent" and that Gentien had a stiff neck for two days, which is also consistent with the diagnoses. Drugs like Isoniazid used to treat tuberculosis, and the vaccine to prevent TB Meningitis were only available by 1952.

Gentien was exposed to many animals and pets: ponies, donkeys, antelopes, cats, lizards and snakes. Also, zoonotic diseases spread to children through close contact with animals and due to their hand to mouth behavior. Gentien may have also had an incomplete de-worming treatment. Diana mentions a "huge chig, complete with eggs and poisonous matter" that Victor removed, she thought successfully, from Gentien's foot at the end of Jan 1943. All these factors in addition to poor nutrition, and hot and humid climate, may have led to a drop in Gentien's immunity, causing reactivation of TB, and spread of the infection to the brain.

Foot note: After I sent this report to Robert he mentioned that Diana commented, when he had an allergic reaction to Penicillin, that Gentien died of a penicillin reaction. This might have been a last minute intervention by the doctor to give Gentien Penicillin and may have been the reason that Pierre protected Diana from seeing Gentien dead as he may have swollen from the allergic reaction to the Penicillin. Yolanda