

# Mouth Matters

Dorion on Dentistry

## Killer Toothaches: How Bad Can It Get?



Before the 1940's and the development of modern antibiotics, toothaches were not uncommonly a fatal condition. Thankfully killer dental infections are fairly rare today in the developed world. However there are a handful of people who still die every year in Canada from complications related to dental infections despite the availability of high-tech antimicrobial drugs and surgical interventions.

There are a number of factors that can set the stage for a simple dental abscess developing into a lethal event. The type of bacteria involved for instance can mean the difference between localized pain and swelling versus a massive rapidly spreading, tissue destroying process. This is the case with necrotizing fasciitis, commonly known as flesh eating disease.

You may well have heard of flesh eating disease through media reports of celebrities who have died or had amputations as a result of this condition. For example Jim Henson, creator and voice of the Muppets died from it in 1990, and Luciene Bouchard, former leader of the Bloc Quebecois had a leg amputated because of necrotizing fasciitis in 1994.

Necrotizing fasciitis of the face is fatal in 20 to 40 per cent of cases

**Late diagnosis and treatment can mean the difference between life and death.**

treatment often requires amputation of the affected body part you can imagine the consequences when it involves the face and jaws. Early diagnosis and rapid initiation of aggressive medical/dental interventions are the keys to surviving the disease process.

Late diagnosis and treatment can mean the difference between life and death in several other forms of potentially lethal dental infection. With infected upper teeth the risk is a rare condition known as cavernous sinus thrombosis (CST). The cavernous sinus is a vascular space

in the base of the skull where blood drains from the face and brain. A CST is the result of infection induced blood clots in this space which because of it's proximity to the brain has lethal consequences in one third of those afflicted. Of those who survive, another one third may suffer permanent debilitating complications including meningitis, brain abscess, stroke, blindness, and pituitary problems.

Out of control infection in the lower teeth can lead to such profound localized swelling that it can cause the airway to be strangulated. This condition is called Ludwig's Angina and before the 1900's it was 100% fatal. Queen Elizabeth I of England was thought to have died from Ludwig's Angina in 1603.

Today the mortality rate associated with this condition is fairly low due to surgery, antibiotics and our ability to secure the airway with a breathing tube. However, aggressive antibiotic resistant infections can further spread into the neck and chest – a condition called Descending Necrotizing Mediastinitis (DSM). This can lead to lung and heart infection and or generalized sepsis (blood poisoning) with multiple organ failure, coma and death as the final result.

Dentists get very nervous when a patient presents with the following cardinal signs of impending life threatening dental infection. Rapid onset of swelling extending to the neck or eye sockets, fever and malaise associated with toothache, elevation of the tongue with changes in one's ability to swallow or speak, shortness of breath, rapid pulse and/or falling blood pressure.

Underlying health problems that compromise the immune system make the risk of a serious dental infection more likely. These include diabetes, cancer therapies, steroid use, HIV and so on. Of course the best treatment is prevention through regular dental care, good diet, and oral hygiene. Fatal dental infections, while rare, can and do happen so never delay seeking treatment early if you develop pain or swelling in or around your mouth and face.

Yours for better dental health,

*Rae Dorion, DDS*

63644521

**Image**  
**Dental Arts**  
FAMILY & COSMETIC DENTISTRY



*Your image is your smile!*

Dorion Dentistry Professional Corp.

Dr. Rae Dorion  
Dr. Lee Deimling  
Dr. Jennifer Gurney-Ozog

25 King George Road, Brantford, ON 519-753-7342