HISTORY OF DENTISTRY

Since prehistoric times, when people have had issues with their teeth, there have been other people there to help. How we care for our teeth has changed over the past several thousand years, and today we call the professionals who care for our teeth dentists. Evidence of dental decay has been found in teeth from skulls that are 25,000 years old and archaeologists have evidence of the first dental fillings in teeth from people who lived around 8000 BC.

The first written reference to dental decay is found in a Sumerian text from 5000 BC. Ancient Egyptian papers dating as back as far as 3700 BC have references to diseases of the teeth, and describe substances to be mixed and applied to the mouth to relieve pain. The first references to dentists are in ancient Egyptian texts from 2700 BC, and refer to a doctor who specializes in treating teeth. Greek writings from 1300 BC by Aesculapius, a Greek physician, discuss extracting (or pulling) diseased teeth.

Toothpaste was used as long ago as 500 BC in China, Rome, and India. Ancient toothpastes included ingredients such as soot, honey, crushed egg shells, and ground ox's hooves. The world's oldest recipe for toothpaste is from Egypt in 400 AD. The formula included mint, salt, grains of pepper and dried iris flower. A modern day dentist made the toothpaste and said, "I found that it was not unpleasant, afterwards my mouth felt fresh and clean." In ancient times people used sticks that were smashed at one end to create a brushing surface.

In medieval Europe, in the 1300s to the 1500s, the elite were aware of the importance of keeping their teeth clean and even had liquids to help whiten their teeth. People's tooth troubles were treated by their own remedies or by barber surgeons. Barber surgeons were jacks-of-all-trades and pulled teeth, performed minor surgery, cut hair and applied leeches. The barber dentists usually pulled teeth to treat decay, but they also knew how to fill cavities and created false teeth out of human teeth and cow bone. Poor people often had better teeth than the richer people because poor people would have had very little sugar in their diets. People believed strongly in traditional remedies: if you had a toothache in Germany, in medieval times, you would have been told to kiss a donkey to cure your toothache!

In 1498, in China, the bristle toothbrush was invented. The bristles were made of the stiff hairs from the back of a pig's neck. Pig's hair was used in toothbrushes until 1938, when nylon bristles were introduced. Today's toothbrushes have about 2,500 nylon bristles grouped in forty tufts.

One of the first recorded dentists in the America was John Baker, who settled in Boston in 1763. George Washington, our first president, was also famous for his false teeth. While many people believe George Washington had wooden false teeth, this was not true. Wood is not a good material for false teeth since saliva would have turned them into a mushy pulp. The first president's false teeth came from a variety of sources, including teeth extracted from human and animal corpses. In 1785, John Greenwood, who served as George Washington's dentist helped to raise public awareness about the newly invented porcelain false teeth. A breakthrough in false teeth happened in 1839 with the discovery of vulcanized rubber, which could be used to hold false teeth. Today's dentures (false teeth) are made of either plastic or ceramic.

In 1728 Pierre Fauchard published his master work, "The Surgeon Dentist," which describes for the first time a vision of dentistry as a modern profession. But it wasn't until the 1800s when advances in the study of dentistry made it both a respected profession and a professional degree. The founders of modern dentistry are Horace Hayden and Chapin Harris. In 1840 they founded the world's first dental society, the American Society of Dental Surgeons, which eventually formed into the American Dental Association. In 1840 they also founded the first dental school, the Baltimore College of Dental Surgery. Hayden and Harris also invented the modern doctorate of dental surgery (DDS) degree, which is the degree that today's dentists hold. In 1866 Lucy Hobbs became the first woman dentist when she graduated from Ohio College of Dental Surgery.

Toothpaste as we know it emerged in the 1800s, with ingredients that included soap and chalk. In 1873, Colgate released the first commercially prepared toothpaste, which had the minty taste we know today. In 1892, the first collapsible tube was marketed and reigned supreme until 1984, when the pump dispenser was introduced. Dental floss was first manufactured in 1882. The 1800s also saw the invention of the first mechanized dental drill, patented by James Beall Morrison in 1871. This drill twirled very slowly and a filling could take several hours to complete.

Although advances were being made in dentistry, most Americans did not brush their teeth every day until after World War II. In WWII, the military required that soldiers brush their teeth twice a day to keep their teeth healthy. The soldiers brought that habit home after the war.

In 1945, Grand Rapids, Michigan introduced fluoride into their public water systems to help fight tooth decay

among residents. After substantial testing showed that fluoride reduced the incidence of cavities by as much as two-thirds, in 1951 the U.S. Public Health Service urged the entire country to fluoridate public drinking water.

Throughout history, dentistry was a painful procedure, since it usually meant having teeth removed without the benefit of any pain killers. In the 1790s, a British chemist began to experiment with the use of nitrous oxide for pain relief and noted its most famous side effect, laughing. He gave the anesthetic the nickname, "laughing gas." During the next 50 years, the gas became very popular, and is still used in dentist's offices today. In 1905, a German chemist discovered procaine, which he named Novocain. Novocain issued in the era of "painless dentistry." In 1957, John Borden invented a high-speed, air-driven hand held dental drill, which shortened the time to prepare a tooth for a filling to a matter of minutes. With the invention of both Novocain and the high speed drill, dentistry truly entered the modern ages.

The first dentists used chisels and hammers to knock out decayed teeth, but today's dentist may use advanced technology such as Computer Aided Design to design dental restorations that look and feel like natural teeth. Today's dentist might even be using lasers in their practice to treat decay and put in fillings.

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