

Down in the Mouth

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Not very many people in the Roman Empire suffered from tooth decay. A diet lacking in the refined sugars and flours was responsible for this; so far only about 5% of skeletons recovered show evidence of tooth decay. On the other hand, the Roman diet of coarse grainy flour made into heavy bread (sometimes with fine grit from the milling stones if you were unlucky and poor) kept your teeth clean but also tended to wear them down with chewing. Many skeletons have been found with teeth ground down almost to gum level.

Some people did have to go to the dentist though: certainly the unlucky 5% who had cavities, which were of course caused by worms eating away at the tooth; any Roman could tell you that! On occasion other people went as well, for reconstructive surgery, for example. Dentistry was a specialized branch of medicine, and there are references to dentists in Egyptian papyri as early as 1200 B.C., and the Greeks and the Etruscans had physicians who specialized in dentistry.

The Etruscans, who were excellent craftsmen, even made dentures for those unfortunate persons who had lost one or more teeth. False teeth in ivory or bone were riveted to a gold band; each end had a loop and these were meant to slip around the teeth on either side of the gap in your smile. Besides this early Etruscan bridgework, gold inlays and caps have also been recovered from excavated skeletons. This, incidentally, was the only time a body could be buried with gold under Roman law: if its teeth were filled with it!

If you had lost or loosened a few teeth in an accident (for example, in a rowdy taberna, or at the games in the circus), the dentist would

carefully wire your teeth in place with fine gold wire until they had healed. This probably worked fairly well most of the time; similar techniques are used today. But sometimes a tooth had to be extracted due to decay or other damage. Dental instruments, forceps and probes, were quite competently made. Like all other medical instruments they were remarkably precise and well suited to their particular uses. Most would be recognized today by a practising physician, and be effectively used by an ancient one.

The drawback with any ancient surgical technique was the lack of any effective anaesthetic and antiseptics, not to mention drugs such as antibiotics and penicillins (and these last two have only been available since the end of 1945 or later!). The mouth was easier to keep clean than, for example, an internal wound (most patients died from wounds and surgery to the abdominal area). So no one, probably, died from having a decayed or damaged tooth pulled. But many wished they would before the extraction was complete, and many others were doubtless convinced that death was imminent! In fact, the Elder Pliny says that a really effective cure for toothache was to jump headlong from a very great height. At least one man is said to have chosen this over a trip to the dentist!

Celsus, a medical writer of the early Imperial period, described the proper procedure for surgical extraction of the tooth. First, the dentist took a probe and scraped around the tooth below the gum. Then, the tooth had to be shaken until it was quite loose. It was considered extremely dangerous to try to extract it before this, lest a piece of it remain in the jaw bone. If the tooth was badly decayed, it was necessary to fill it with lead so it would not splinter in the dentist's forceps. If all of the tooth did not come out cleanly, smaller probes and forceps were used to dig around in the jaw bone and remove the root, the bits of splintered bone or tooth.

Besides the dentist and the poor suffering patient, one or two other persons would be present at any extraction: an assistant or two, probably slaves, whose job it was to hold the patient still during the surgery. For other surgical procedures there are recorded on tombstones scenes of patients obviously very wide awake, tied hand and foot for the process. Perhaps some dentists used this technique as well. All this does illustrate how effective ancient painkillers were, or rather were not.

Since everyone knew it was really worms which ate away the inside of the tooth, or caused decay, cleaning your teeth was largely a cosmetic matter. There were various herbal preparations known to kill the worms which could be stuffed down into the tooth, and the top sealed off with wax. But most tooth preparations were meant to make

your breath smell good and your smile white. Romans were very concerned about how they smelled; not smelling at all was only slightly better than smelling bad. One was supposed to smell good. During the late Republic and Imperial period the manufacture of perfumes and aromatics was a "million dollar business".

Keeping your breath sweet-smelling was important: mint and parsley were recommended, and you could also chew "gum" from certain aromatic trees. These were especially useful if you had been eating a dish with garlic, or with garum, the much-loved sauce made from fermented fish guts. Both of these could make your breath unpleasant. So too could a tooth-whitener used by some provincial people: human urine, which was also used for cleaning and whitening togas. If your teeth were very stained you could use a paste of emery or pumice, or a mixture of ashes of dogs' teeth with honey. This was thought to keep your smile pearly-white.

Periodontal or gum disease was known and a problem, even if tooth decay wasn't, and there were many recipes for rinses and mixtures to keep the gums healthy. Basic cleaning was salt-and-water twice a day, which probably did have some anti-bacterial effect. Perhaps warm vinegar and honey did tighten the gums around the teeth. I cannot comment on the efficacy of chewing anemone root, and I seriously question whether rinsing your mouth with tortoise's blood three times a year did any good at all!