For the Patient

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Dealing with tooth pain

o you have tooth pain? Whether it's a short-lived, sharp, shooting pain or a prolonged, mild ache, you should see your dentist. (*NOTE:* There are other sources of oral pain that are not discussed here, like oral sores, jaw pain, and headaches that your dentist also may be able to help with.)

TYPES OF PAIN

Sharp pain

You may feel a shooting pain when you eat or drink something hot or cold or sweet or sour. Pressure, like from toothbrushing or biting, also might spark this kind of pain.

Some things that may cause this short-lived pain reaction $\mathsf{include}^1$

- a cavity;
- a cracked tooth;
- an exposed tooth root.

Any of these can leave the inner portion of your tooth, called the pulp, unprotected. The pulp is your tooth's nerve and blood supply. In a healthy, undamaged tooth, the pulp is protected by 3 outer layers: enamel, cementum, and dentin. Enamel is the part of the tooth that you see, and it connects to the dentin. Cementum also connects to the dentin, but it covers the tooth root (Figure).

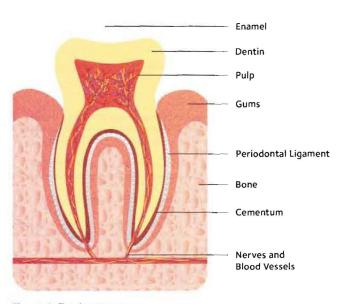


Figure 1. Tooth structure.

Things that damage the enamel, like a cavity, chip, or crack, may cause tooth pain.

Anything that exposes the cementum also might set you up for pain. Cementum is softer than enamel. When it is left unprotected by the gums, it can be worn away easily.

Damage to the enamel or cementum may leave the dentin exposed. The dentin directly connects to the pulp through tiny tubes or canals. Researchers do not know why, but exposure of the dentin may leave the pulp sensitive to things like changes in temperature, certain foods and beverages, or pressure.

Dull, throbbing pain

Sometimes dental pain involves an area in or around the mouth and jaw with a steady ache that goes on for days. This type of pain may indicate an infection.

TREATMENT

Treatment depends on the cause of the pain you are having. Sharp pain might be caused by enamel damage like cavities, chips, or cracks, which might call for repair. You may need a new dental filling or crown. When the cementum is damaged—exposing the dentin—topical varnish, which goes on as a liquid and then hardens to protect the exposed tooth roots, might be applied.

Treatment for throbbing pains also depends on what is causing the problem. If an infection is involved, your dentist will work to identify the source. Once that has been narrowed down, he or she can look at options like removing the infected tissue (for example, with a root canal).

CONCLUSION

Tooth pain can be experienced in different ways. Taking care of the problem requires finding the reason for the pain.
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"For the Patient" provides general information on dental treatments. It is designed to prompt discussion between dentist and patient about treatment options and does not substitute for the dentist's professional assessment based on the individual patient's needs and desires.

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1. Napenas JJ. Intraoral pain disorders. Dent Clin North Am. 2013;57(3):429-447.

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