# Pain

**National Dental Examining Board of Canada (NDEB) Virtual OSCE and Assessment of Fundamental Knowledge (AFK)**

About 12% of the Virtual OSCE · 4 topics · 2026 blueprint

Pain covers the diagnosis and management of orofacial pain of dental and non-dental origin, local anesthesia, and analgesic prescribing. It is about 12% of the Virtual OSCE in NDEB's 2026 blueprint. Questions ask you to find the source of pain from history and tests, separate dental from non-dental causes, choose an analgesic regimen and dose, and solve anesthesia problems.

**You should be able to:** Why does a nerve block fail more often in a tooth with irreversible pulpitis, and what can you add?

## Every topic: the key point and the trap

### PA-1 Finding the source of dental pain

A pain history covers site, onset, character, radiation, timing, triggers, relief and severity; spontaneous, lingering or night pain points to irreversible pulpitis.

**Trap:** Relying on the radiograph to find a crack. Cracks are rarely visible on radiographs; diagnosis is clinical with bite tests and direct inspection.

### PA-2 Non-dental orofacial pain

Trigeminal neuralgia causes brief, electric, shooting pain triggered by light touch, washing or talking, with pain free periods; the first line drug is carbamazepine, and a young patient needs imaging to exclude multiple sclerosis or a tumour.

**Trap:** Extracting or root treating a tooth for pain that the tests do not localize. When dental tests are normal, look for a non-dental cause before irreversible treatment.

### PA-3 Analgesic prescribing

For most acute dental pain in adults, ibuprofen 400 mg every 6 hours, alone or combined with acetaminophen 500 to 1000 mg every 6 hours, works as well as or better than opioid combinations.

**Trap:** Prescribing a codeine combination as the default strong analgesic. Evidence favours the ibuprofen and acetaminophen combination, with fewer side effects and no misuse risk.

### PA-4 Local anesthesia problems

Inflamed tissue is acidic, so more anesthetic stays in the charged form that cannot cross the nerve membrane; this explains failure near an abscess and with irreversible pulpitis.

**Trap:** Giving repeated blocks with no change in approach. Inflamed pulps need supplemental techniques or a different anesthetic, and each extra cartridge counts toward the maximum dose.

## Key terms

**Referred pain:** Pain felt at a site other than its source, such as pulpal pain felt in the opposing arch.

**Allodynia:** Pain from a stimulus that is normally not painful, such as light touch.

**Trigger zone:** A small area whose light stimulation sets off trigeminal neuralgia attacks.

**Temporomandibular disorder:** A group of conditions affecting the jaw muscles and joints that causes pain and limited movement.

**Ion trapping:** Retention of local anesthetic in its charged form in acidic inflamed tissue, reducing nerve penetration.

**Supplemental anesthesia:** Extra techniques such as buccal infiltration, intraligamentary or intraosseous injection added after a failed block.

**Opioid stewardship:** Using opioids only when needed, at the lowest dose and shortest duration, with counselling.

**Jaw claudication:** Jaw pain with chewing that eases with rest; a sign of giant cell arteritis.

**Cracked tooth:** An incomplete fracture that causes sharp pain on biting and release, often with normal radiographs.

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