Surgery

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

About 8% of the Virtual OSCE · 4 topics · 2026 blueprint

Surgery covers extractions, third molar assessment, odontogenic infections, surgical complications, and the medical and pharmacologic planning around oral surgery. It is about 8% of the Virtual OSCE in NDEB's 2026 blueprint. Questions ask you to interpret radiographs for surgical risk, decide what to treat in the office and what to refer, manage complications, and prescribe safely.

You should be able to: A patient returns 3 days after a mandibular molar extraction with severe throbbing pain and an empty socket. No fever or swelling. What is the diagnosis and treatment?

Every topic: the key point and the trap

SU-1 Third molars and nerve risk

Indications for removing third molars include recurrent pericoronitis, caries or resorption of the second molar, cysts or tumours, and periodontal defects distal to the second molar; asymptomatic healthy third molars may be monitored.

Trap: Proceeding to a routine extraction despite darkening of the root and loss of the canal outline. These signs predict nerve exposure and should change the plan or the operator.

SU-2 Odontogenic infections

The first principle is removing the source and draining pus: extraction or endodontic access, and incision and drainage of fluctuant swelling.

Trap: Sending a patient home with antibiotics alone for a fluctuant swelling. Without drainage the infection keeps spreading and can reach the airway.

SU-3 Extraction complications

Alveolar osteitis (dry socket) presents 2 to 4 days after extraction with severe throbbing pain, an empty socket and bad taste; risk factors are smoking, difficult mandibular extractions and oral contraceptives.

Trap: Repeating the nose blowing test or probing the defect to measure it. This can enlarge a small communication; test once, gently.

SU-4 Planning surgery for medically complex patients

Patients on warfarin with an INR in the therapeutic range (usually up to 3.5) can have simple extractions without stopping it, using local hemostatic measures.

Trap: Treating an extraction in irradiated bone as routine. Osteoradionecrosis risk is lifelong after high dose jaw radiation.

Key terms

Coronectomy: Removal of a third molar crown while leaving the roots, to reduce the risk of inferior alveolar nerve injury.

Pericoronitis: Inflammation of the soft tissue around a partly erupted tooth, most often a mandibular third molar.

Alveolar osteitis: Dry socket: painful loss of the blood clot from an extraction socket, usually 2 to 4 days after surgery.

Oroantral communication: An opening between the mouth and maxillary sinus, most often after extraction of maxillary molars.

Ludwig angina: Rapidly spreading bilateral cellulitis of the submandibular, sublingual and submental spaces that threatens the airway.

Incision and drainage: Opening a fluctuant abscess to release pus and reduce bacterial load.

Trismus: Restricted mouth opening, often from muscle spasm or infection of the masticatory spaces.

Tranexamic acid: An antifibrinolytic used as a 5% mouthwash to control bleeding after oral surgery.

Osteoradionecrosis: Non-healing exposed bone in a field of previous radiation therapy.

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