

## Appropriate Approaches to Minimize Legal Issues in Case of Peripheral Nerve Damage Related to Dental Implant Surgery

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There are three legal elements of a dental malpractice lawsuit and mediation regarding implant surgery: 1) Proper treatment planning and implant procedures, 2) Appropriate follow-up evaluation and management after surgery, and 3) Evidence of informed consent about the treatment (whether or not there is an explanation).

Then, how to prevent damaging the inferior alveolar nerve when installing implants in the mandible?

1. When drilling the implant, make sure that the drill end, not the implant, is at least 2mm away from the superior mandibular canal.
2. If the bone height from the alveolar crest to the upper wall of the mandible is less than 6mm, do not install the implant in the usual way.
3. When installing the implant through panoramic and mandible CT images, understand the intramandibular course of the inferior alveolar nerve.
4. To do this, the magnification and error rate of the digital imaging device must be known in advance and also the functional anatomy of the inferior alveolar nerve.
5. In case of damage to the inferior alveolar nerve despite the above precautions, change to a short implant within 36 hours or remove the implant fixture (fixture removal).

Despite the above approaches, how should you follow up and treat if the inferior alveolar nerve gets damaged? First, you should change to a short implant within 36 hours or remove the implant fixture. After determining the degree of nerve damage, you should proceed to appropriate medication, physical therapy, or surgical treatment. Thus, you need to understand the assessment of nerve damage, management of peripheral nerve injury, and indications for nerve repair. Instead of making the patient unsure about the recovery from nerve injury, it is recommended that you should refer the patient to a specialist at the earliest possible.

Make sure to follow the above details, and in this lecture, we will be learning more about the functional anatomy of the inferior alveolar nerve.

1. Neurovascular dissection from the foramen ovale to the lingula of the mandibular branch of the trigeminal nerve (V3)
2. Neurovascular dissection within the mandibular canal
3. The running direction and variation from the occlusal and lateral surface of the inferior alveolar nerve
4. Functional anatomy of the mental foramen, mental nerve, and incisive nerve

Profile

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