

COMPREHENSIVE LIST OF COMPLICATIONS

1. Implant related Classification of Implant Complications

Intra operative complications : While implant is being placed

Post operative complications : After the implant is placed

1) Immediate 2) Late

Intra-operative Complications:

- a. Hemorrhage(escape of blood from ruptured blood vessel)
- b. Nerve injury (1.7 to 43.5% chances - for temporary alterations and from 5% to 15% chances - for permanent alterations over one year after surgery)
- c. Perforation of upper jaw or nasal sinus (2% to 11% is the chances for occurrence)
- d. Jaw fracture
- e. Accidental Swallowing of foreign bodies : (The literature says that although 90 % of ingested foreign objects could pass through the gastrointestinal tract uneventfully, there are roughly 10% that require endoscopic removal, while still 1% will even require operation.)

Post-operative Complications

1) Immediate postoperative complications

- a. Hemorrhage(escape of blood from ruptured blood vessel)
- b. Ecchymosis(discoloration of the skin caused by bruising)
- c. Edema(accumulation of fluid in tissue)
- d. Emphysema(air trapped in body tissues)
- e. Early infection
- f. Due to improper technique:
 - ✓ Damage to adjacent teeth
 - ✓ Osseous perforations
 - ✓ Insufficient primary stability
 - ✓ Minimal space between implants

2) Late post-operative complication

- a. Implant screw fracture (Risk of fracture of implant screw is 1% and abutment screw is 2% respectively.)
- b. Chronic sinusitis
- c. Chronic pain
- d. Late infection
- e. Peri-implant pathology (around the implant)
- f. Screw loosening (0.62% to 2.29% is the frequency for occurrence)

g. IMPLANT FAILURE (Failure rate for implants is 2-5%)

ENDODONTIC COMPLICATIONS

1. Intra-operative Complications:

- Access related

- A. Treating wrong tooth
- B. Missed canals
- C. Failure to remove caries
- D. Damage to existing restorations

- Instrumentation related complications:

- A. Over and under instrumentation
- B. Fracture of instruments
- C. Root perforations

- D. Ledge formation
 - **Obturation related**
- A. Under extended root fillings
- B. Over extended root fillings

2. Postoperative complications:

- A. Pain
- B. Swelling
- C. Sensitivity

Miscellaneous complications:

Irrigant related mishaps

Local Anesthesia complications:

1. Local complications
2. Systemic complications

- Local complications

1. Needle breakage
2. Prolonged anesthesia
3. Trismus
4. Soft tissue injury
5. Hematoma
6. Pain during injection
7. Infection
8. Edema
9. Post anesthetic intraoral lesions

- Systemic complications

1. Allergy
2. Idiosyncrasy
3. Toxicity

Complications of detachment of dental crowns or dental bridges:

1. Ingestion of the detached crown or bridge
2. Pain, sensitivity, discomfort
3. Chipped porcelain restorations
4. Secondary caries
5. Tooth fracture

WISDOM TOOTH EXTRACTION COMPLICATIONS

1. Intra-operative complications

- **During incision**

- a. Injury to nerve (1.3% for temporary and 0.33% for permanent paresthesia to a high of 4.4% for temporary and 1% for permanent paresthesia. The risk of permanent paresthesia following extraction of a mesioangular impaction is as high as 6.8%.)
- b. Hemorrhage

- During bone removal

- a. Damage to 2nd molar
- b. Soft tissue injury
- c. Subcutaneous emphysema
 - During tooth removal
- a. Breakage of instrument
- b. Forcing into submandibular Space
- c. Fracture mandible (with a frequency of 0.0049% in literature)
- d. Temporomandibular joint injury (with a frequency of 1.6%)

2. Postoperative complications

- Immediate

- a. Hemorrhage
- b. Pain
- c. Edema
- d. Drug reaction

- Delayed

- a. Dry Socket
- b. Trismus
- c. Oro antral fistula

ORTHODONTIC TREATMENT COMPLICATIONS

During orthodontic treatment

- Toothache, occasional discomfort or pressure on the teeth
- Scratches and bruises
- Enamel Trauma
- Pulpal Reactions and Root Canal Treatment
- Allergy
- Root Resorption
- Gaps

After orthodontic treatment

- Pulpitis
- White spots on the surface of the teeth
- Periodontal tissue diseases
- Relapse of orthodontic defects

Although this is an exhaustive list of the complications, a complete list is impossible to make because there may be certain complications, waiting to happen which are not yet listed in the literature