

COMPLICATIONS THAT MAY HAPPEN DURING ORTHODONTIC TREATMENT

Please note that the following complications have minimal chances and are mostly manageable under the hands of an expert.

Orthodontics has the potential to sometimes cause damage to hard and soft tissues. The most important aspect of orthodontic care is to have extremely high standards of oral hygiene before and during orthodontic treatment. It is also essential that any carious (decay) lesions are dealt with before any active treatment starts.

ORTHODONTIC TREATMENT IS A MULTIPLE SITTINGS LONG TREATMENT WHICH CAN TAKE FEW MONTHS TO 1-2 YEARS. PATIENTS HAVE TO COME FOR ALL THE SITTINGS AS AND WHEN THE DOCTOR RECALLS.

DOCTOR MUST BE INFORMED AS SOON AS POSSIBLE WHENEVER A PATIENT EXPERIENCES ANY OF THE FOLLOWING COMPLICATIONS.

Please note: The cost of management of complications(if any) is not covered in the treatment charges.
SUMMARY OF COMPLICATIONS THAT CAN HAPPEN

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

During the orthodontic treatment

- Toothache, occasional discomfort or pressure on the teeth (chances minimal, mostly manageable)

When beginning orthodontic treatment and after inspection, you may feel unpleasant pressure on your teeth, toothache, or just discomfort. It depends on the individual and on their pain threshold.

A Paracetamol tablet may be required or 10-15 days.

- Scratches and bruises (chances minimal, mostly manageable)

Also, at the beginning of orthodontic treatment, scratches and bruises may appear on the mucosa, generally caused by a fixed device. In such cases,



orthodontic protective wax is employed. Such complaints are temporary and tend to arise over the first 5-7 days after beginning treatment. Later, the mucosa adapts to the braces and the abrasions disappear.

- Enamel Trauma(chances minimal, mostly manageable)

When placing appliances, careless use of a band seater can result in enamel fracture. Debonding can also result in enamel fracture, both with metal and ceramic brackets.

Care must always be given to remove brackets and residual bonding agents appropriately to minimise the risk of enamel trauma.

- Enamel Wear(chances minimal, mostly manageable)

Wear of enamel against both ceramic and metal brackets may occur. It is common in upper canine as upper canine may hit bracket of lower canine. Where demineralization is present post treatment, fluoride application either via toothpaste, or mouthwash with 0.2 % sodium fluoride can be helpful in remineralising the lesion and reducing the unsightliness of decalcification.

- Pulpal Reactions(chances minimal, mostly manageable)

Some degree of pulpitis is expected with orthodontic tooth movement, which is usually reversible or transient. Rarely, it leads to loss of vitality, but there may be an increase in pulpitis, in previously traumatized teeth with fixed appliances. This reduces life of teeth by 30%. Such teeth may require Root Canal Treatment with caps(cost of which is extra).

- Allergy (chances minimal, mostly manageable)

Allergy to orthodontic components intra-orally is exceedingly rare, however, there have been studies on the nickel release and corrosion of metals with fixed appliances.

- Root Resorption (chances minimal, mostly manageable)

Some degree of external root resorption is inevitably associated with fixed orthodontic treatment. Resorption may occur on the apical and lateral surfaces of the roots, but radiographs only show apical resorption to a certain degree.

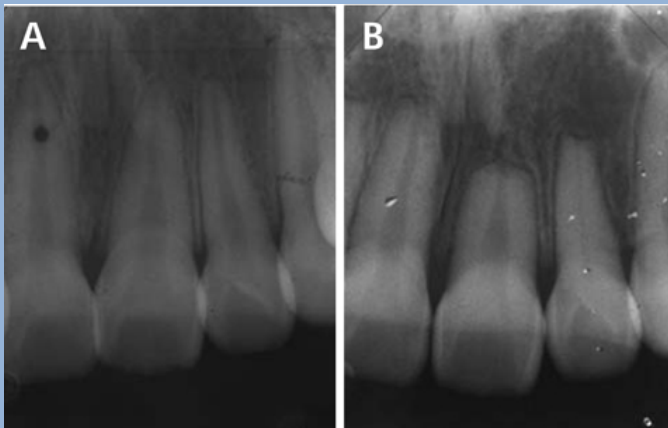
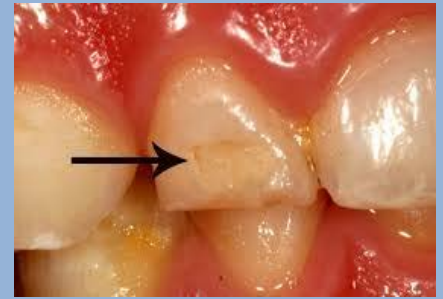
This reduces life of teeth by 30%.

- Gaps: Gaps may appear where food impaction starts, they are mostly manageable, but sometimes may not be manageable.

AFTER THE ORTHODONTIC TREATMENT

- Pulpitis (chances minimal, mostly manageable)

Transient pulpitis may also be seen while debonding of ceramic brackets. This reduces life of teeth by 30%.



- White spots on the surface of the teeth (chances minimal, mostly manageable)

This complication is caused by long-term bad oral hygiene. White patches appear around the brackets.

The enamel beneath the brackets remains undamaged. A coating

built up on the surface of the enamel causes demineralisation.

This occurs due to harmful bacteria which break down leftover

food around the brackets into acids. The acids eat into the

enamel resulting in demineralisation.

This is a stage preceding tooth decay.

If this complication arises and repeated instruction on oral

hygiene and visits to a dental hygienist have no effect, the doctor

reserves the right to premature termination of treatment. The

priority is a healthy set of teeth and only afterwards a straight set.



SYSTEMIC INFECTIONS

- Cross infection (chances minimal, mostly manageable)

Spread of infection between patients, between operator and patient and by a third party should be

prevented by cross infection procedures throughout the treatment. Use of gloves, masks, sterilised

instruments and 'clean' working areas are paramount. A medical history must be taken for every patient

to determine risk factors, although cross infection control should be of a standard to prevent cross

contamination regardless of medical status.

- Infective endocarditis (chances minimal, mostly manageable)

Patients at risk of endocarditis should be treated in consultation with their cardiologist and within the

appropriate guidelines. The patient must exhibit immaculate oral hygiene, antibiotic cover will be

required for invasive procedures such as extractions, separation, band placement and band removal.

Periodontal tissue diseases (chances minimal, mostly manageable)

Fixed appliances make oral hygiene difficult even for the most motivated patients, and almost all

patients experience some gingival inflammation.

Resolution of inflammation usually occurs a few weeks after debond, bands cause more gingival

inflammation than bonds, which is not surprising since the margins of bands are often seated

subgingivally.

Plaque retention is increased with fixed appliances . Oral hygiene instruction is essential in all cases of

orthodontic treatment, and the use of adjuncts such as electric toothbrushes, interproximal brushes,

chlorhexidine mouthwashes, fluoride mouthwashes and regular professional cleaning must be

emphasised.



Temporomandibular Joint dysfunction (TMD)

Much attention in the literature has been focused on the relationship between TMD and orthodontic treatment.

Pre-existence of TMD should be recorded, and the patient advised that treatment will/will not predictably improve their condition. Some patients may suffer with increased symptoms during treatment which must also be discussed at the beginning of treatment.



LATE COMPLICATIONS AFTER ORTHODONTIC TREATMENT

- Relapse of orthodontic defects

Every orthodontic treatment has a tendency to relapse, i.e. the teeth return to their original position. We prevent this by using retention devices and retainers. Retention devices are laboratory products made to fit your teeth exactly. Retainers are wires which are stuck to the back surface of your teeth to maintain their position. This phase is very important for orthodontic treatment.



ALIGNERS

Clear orthodontic aligners are typically used for patients who have mild or moderately crowded teeth, or have minor spacing issues. Patients who have severe crowding or spacing problems -- or severe underbites, overbites, or crossbites -- may need more complex treatment.

- Patient noncompliance can cause all sorts of difficulties.
- At a minimum, not wearing your aligners as directed will slow the progress of your treatment.
- Worse, not wearing them for some period of time may allow your previous progress to relapse, or even allow your case to veer completely off-track.
- Because they are removable however, too many patients make excuses and just don't wear them long enough each day for them to be effective. If you want the best results with Invisalign, make sure you only remove them to eat and brush.
- Although this is an exhaustive list of the complications, a complete list is impossible to make, also there may be certain complications, waiting to happen which are not yet listed in the literature.
- Disclaimer: The above information may not be verified, exhaustively by experts.

