YOUR ORTHODONTIC TX BOOKLET

INTRODUCTION

The purpose of this brochure is to inform you about the course of events that may be expected during orthodontic treatment. It discusses problems that may be encountered before, during and after treatment. Please read this brochure carefully noting any questions you may wish to discuss with your orthodontist personally at the treatment planning appointment.

As a rule, excellent orthodontic results can be achieved with informed and co-operative patients. The following information is routinely supplied to anyone considering orthodontic treatment in our office. While recognising the benefits of a pleasing smile and healthy teeth, you should also be aware that orthodontic treatment, like any treatment of the body, has some inherent risks and limitations. These are seldom enough to contraindicate treatment, but should be considered in making the decision to have orthodontic treatment. Orthodontic treatment usually proceeds as planned, however, like many medical and dental procedures results cannot be guaranteed, nor can all consequences be anticipated.

TYPICAL TREATMENT PROGRAM

1. Orthodontic Examination and Records

Your first visit involves a complete orthodontic examination. If treatment is required, a set of orthodontic records is obtained which includes plaster models of the teeth, x-rays of the head and teeth and photographs.

2. Treatment Planning

Based on the findings of the examination of the patient and study of the orthodontic records, the treatment options and/or plan are prepared. An appointment will be made so that treatment options may be discussed, any questions answered and financial arrangements clarified.

3. Dental Checkup

If all are in agreement to proceed with the treatment plan, the patient must have a complete examination by their family dentist and any work required completed prior to starting orthodontic therapy. It is important that the patient maintain their normal periodic “check ups” with their family dentist especially during the period of orthodontic treatment.

4. Fitting of Orthodontic Appliances

Impressions or moulds of the teeth are usually taken for appliances to be made prior to their fitting.

A. Preband Appointment

The time required to fit braces is about 30 minutes depending on the appliances. The normal routine involves an appointment one week prior to the fitting of the braces for impressions to be taken.
This is called a Preband appointment. Models of the teeth are made from these impressions and braces fitted to the models. The braces are then encased in a custom mouthguard and detached from the model.

B. Banding Appointment

The braces are fitted to the teeth at the Banding appointment via the custom mouthguard. This technique is called indirect banding because most of the work occurs outside the mouth. This allows the banding procedure to be simpler, faster and more comfortable for the patient.

C. Bands and Separators

Sometimes molar bands (metal rings fitted around the back teeth) are placed. In this case, separators are placed at the Preband appointment. Separators are small rubber rings that are fitted between the molar teeth and their adjacent teeth. After a few days, a space develops where the separator was placed. This
allows the molar band to be fitted. The teeth may be tender for a few days after the separators are placed. If a separator is lost prior to the next appointment, please contact our receptionist.

5. Orthodontic Adjustments

Once the appliances are fitted, adjustment appointments are scheduled at four, six or eight weekly appointments. Normally these appointments are between five and fifteen minutes in duration. Long adjustment appointments are sometimes required and are scheduled differently.

6. Appointment Scheduling

The initial appointments for records and treatment planning are important times for information gathering and communication.
We value this time to accurately diagnose the orthodontic problems and fully explain and discuss the treatment options.
Placement of the braces or other appliances are also critical times that provide the foundation for smooth and trouble free treatment.

We schedule these appointments in the mid morning and early afternoon (ie during school hours). Long adjustment appointments or appointments to repair any breakages may also be scheduled at these times. Early morning and late afternoon appointments (after school hours) are reserved for normal adjustment appointments.

We make every effort to provide appointment times that suit the individual. We aim to spend the total allotted time completing treatment efficiently and to the highest standard. We focus strongly on “running on time” and may need

to reschedule an unplanned procedure such as a broken bracket.

7. Getting used to Appliances

- Braces

In the early stages following placement of the braces, it is normal for the gums and cheeks to be irritated by the brackets and wires.
Use of the silicone strips or wax is advised. The tissues toughen up and the problem is temporary. Call our receptionist if the problem persists or if a wire is protruding. Problems with the wire can happen if it slips around the arch and is longer on one side or if a bracket or molar tube breaks. Small ligature tie wires or coil springs can also unravel and need to removed or replaced. Care needs to be taken to avoid trauma to the region of the mouth as braces can cut the cheek tissue. Mouthguards can be made to cover the braces if playing contact sport.

- Twin Blocks

Twin Blocks are worn full time unless otherwise directed. They are not worn during contact sport, swimming or while brushing the teeth. Clasps can sometimes irritate the cheeks and it is important that the appliances are not worn or stored incorrectly such that the clasps are bent out of shape. A fee may be charged for repairs or replacement of Twin Blocks.

- Bite Correctors

Bite correctors are connected to the braces and sit between the braces and the cheeks. Irritation of the cheeks is normal soon after the appliances are placed. A soft diet and regular disinfectant mouth washes help until the tissues accommodate the appliance.

- Headgear and Protraction Facemasks

Headgear or Protraction Facemasks are worn at least 12 hours a day or as directed. They are normally worn when sleeping and at other times such as studying or watching television. These appliances should not be worn when playing or running around. Headgear is designed with quick release straps should anything catch the strap. The headgear is bent to follow the contours of the cheeks but commonsense is necessary to avoid injury.

- RME (rapid maxillary expansion) appliances

A RME is designed to expand the upper jaw and teeth. This usually occurs over a three to four week period and the appliance is then left in place while the teeth and bone settle in the new expanded position. These appliances can irritate the cheeks in the early stages and use of the silicone strips or wax is advised.
The tissues toughen up and the problem is temporary. It is usual for a gap to develop between the upper front teeth as the expansion occurs. This normally closes spontaneously over the following weeks.

- Retainers

When wearing removable appliances, such as retainers or removable expansion appliances, reasonable judgement must be used. The patient should not wear an appliance if there is a chance of it being dislodged, for example while swimming. If a retainer breaks, do not wear the broken parts. Call the office immediately so that the retainer may be repaired or remade if needed. A fee may be charged for repairs or replacement of retainers.

8. Breakages and Other Problems

Brackets rarely just “fall off”. The vast majority break due to a the patient biting on something hard. Please inform us as soon as is practical if anything becomes loose, breaks or is sharp. A bracket or other appliance that has detached from the tooth or teeth needs to be reattached so that treatment continues as planned. Wires can become dislodged, bent or broken and may protrude at the back of the mouth. Silicone strips, wax or sugarless gum can be used on wires or brackets for protection.

If a broken bracket is left unrepaired, progress of treatment can be delayed or affected. An appointment is required to repair any breakages and this appointment is longer than a normal adjustment appointment. Sometimes this can only be scheduled in the mid morning and early afternoon. Repair of a breakage that has not been notified prior to a normal adjustment appointment will occur at a rescheduled time. A fee may be charged if an excessive amount of breakages occur.

9. Removable Orthodontic Appliances

(e.g. elastics, Twin Block appliances, Headgear, etc)
Small elastic rubber bands (elastics) may be used to close spaces between the teeth or to correct the bite. Patients are instructed how to attach the elastics which are changed daily or if they break. Compliance with elastics is crucial. If instructed to wear elastics full time; then only 24 hours a day wear is satisfactory.

FREQUENTLY ASKED QUESTIONS

Will the treatment hurt?

It is normal for teeth to be tender about six to eight hours after braces are fitted.
This will last for a few days. The intensity and duration of the discomfort varies with each patient. Panadol, Panadeine, Nurofen or Nurofen Plus may need to be taken to relieve any discomfort. It is recommended that you see your pharmacist for the medication that would suit you. Teeth can feel “tight” after an adjustment but it is usually mild and disappears quickly.

The cheeks and lips also need time to become accustomed to braces or other appliances. Silicone strips and/or wax are supplied to cover areas on the appliances that irritate the soft tissues. Sugarless gum (Extra) can also be used.

A “settling in” period is also normal for other appliances such as Twin Blocks, expansion appliances, holding

arches and headgear. Few problems are experienced once your mouth has adjusted to the appliance, however some perseverance is required initially.

What food can I eat?

If you eat hard and/or sticky foods, sooner or later wires will be bent or broken and brackets and bands will come loose. This will very likely prolong your treatment and make it more difficult to get a good result.

Sweets and lollies are usually hard and should not be eaten; minties, toffees, boiled lollies, hard chocolate, ice or ice blocks, hard biscuits, nuts and other similar foods ill all damage braces. On special occasions, it is nice to have sweets and it is better to choose a softer alternative such as a cake, a soft centred chocolate or ice cream. Most bread, meat, fruit and vegetables are fine, however, hard or crisp foods such as apples and raw carrots should be sliced or shredded before eating. It is also best to cut meat off bones and corn off the cob.

How long will I need braces?

The normal period for treatment with full braces is generally 18 months to 2 years. This can vary considerably in some cases.

Will I have to have teeth removed?

Orthodontic treatment is planned to place the teeth in the ideal position for aesthetics of the smile, the bite, the underlying skeletal framework and with respect to expected future growth and ageing.

In some cases, different factors may necessitate removal of teeth as part of the orthodontic treatment. Meticulous planning is carried out to formulate an orthodontic treatment plan. The decision to extract any teeth is not taken lightly. It is based on specific criteria and, if necessary, is fully explained.

POTENTIAL PROBLEMS ASSOCIATED WITH ORTHODONTIC TREATMENT

The patient and/or parents should be aware of the following potential problems. Individual patients are notified if they have an increased risk of a potential problem.

1. Dental Decay and Decalcification

Orthodontic appliances do not cause decay, but because of their presence, food particles are retained more readily and the potential for decay is increased. The retained food may also lead to swollen gums.

Retained food or plaque will lead to permanent white lines (decalcification). These are sometimes visible when braces are removed and are usually found between the metal band or bracket margins and the gums and signal the early stage of cavity formation. In some cases, this decalcification can be reversed with special toothpastes, however in severe cases it is permanent.

These problems can be prevented with proper diet, good tooth brushing habits and regular check-up appointments with the family dentist. It is important to brush teeth immediately after eating and practice proper techniques of brushing when braces are in place. If brushing is not possible at a given time, take several mouthfuls of water and rinse thoroughly.

Remember, decalcification (permanent markings), decay or gum disease can occur if patients do not brush their teeth properly and thoroughly during the treatment period. Excellent oral hygiene and plaque removal is a must. Sugars, sweets and snack foods should be avoided. Snacking between meals should be minimised to allow the teeth to remineralise.

2. Swollen Gums and Periodontal (gum and bone)

Problems
In some areas of the mouth the appliances may impinge or press on the gum tissue. This is usually not a problem, but if the patient does not brush well in the area, the gum tissue may become swollen. It is necessary that the gums and teeth be brushed and cleaned thoroughly after eating to keep them healthy. The patient should contact our receptionist if the problem persists or worsens.

We do know that some individuals are more prone to developing gum problems than others. Factors that can contribute to this problem are inadequate oral hygiene, accumulation of plaque and debris around the teeth and gums, incorrect brushing procedures, mouthbreathing and the general health of the patient.

Periodontal disease is cyclical. It may remain inactive for long periods of time and then flare up into an active state for no apparent reason. If the flare up occurs during the course of orthodontic treatment, it may be difficult to or even impossible to control the degree of bone loss and teeth could be lost. This is rare, but it can happen.
Your orthodontist may recommend referral to a periodontist (gum disease specialist) for evaluation of various conditions. In some cases, particularly in adults, the orthodontist may request that the patient regularly see a periodontist during the entire course of orthodontic treatment.

Occasionally, it may be necessary to move teeth into an area where there is less bone support for the teeth. This could lead to recession of the gums around the teeth involved and the need for periodontal surgery.

3. Impacted Teeth

Teeth which stay partially or completely under the gum are called “impacted”. Most teeth become impacted as a result of what is known as “ectopic (misdirected) eruption pattern” due to crowding of the teeth or a small jaw size. The treatment of an impacted tooth depends on the cause and the relative importance of the tooth.
The most commonly found impacted teeth are third molars or “wisdom teeth”. These teeth do not erupt properly into place due to insufficient room in the jaws. The orthodontist may request that these teeth be extracted before or after orthodontic treatment. Occasionally impacted wisdom teeth will have to be extracted at a very early age if they are causing damage to adjacent teeth or are blocking the eruption path of the other teeth.

If it is decided to move the impacted tooth into proper alignment by orthodontic means, it will require the aid of an oral surgeon or periodontist to expose the impacted tooth, to which an attachment is secured. This will provide a

"handle " from which a force is applied, gradually moving and guiding the tooth into position. This is usually performed for impacted canines.

The length of time required to move an impacted tooth can vary considerably. Factors include the difficulty of diagnosing the exact angle and position of the tooth, physical or mechanical limitations with guiding the tooth in the desired direction, or because of the nature and amount of bone and gum tissue present in the site to which the tooth is to be moved. These are not readily predictable factors, therefore an estimate of the treatment time could be inaccurate!

The roots of adjacent teeth can be damaged by the presence of an impacted tooth and/or orthodontic movement of the impacted tooth. The incidence is low and seldom severe. Referral for a 3D CT (computer tomogram) is sometimes recommended to accurately locate an impacted tooth relative to the adjacent teeth. This information is often invaluable in deciding the treatment plan.

In some instances, the impacted tooth may be fused to the bone ("ankylosed") and will not move. It is not known if a tooth is ankylosed until a force is applied to try to move it.

4. Root Resorption

This condition involves shortening of the root tip of one or more teeth which may occur to varying degrees during orthodontic treatment, but is usually mild and does not affect the health or longevity of the teeth. The upper incisors (front teeth) are most commonly involved. There have been instances where all teeth are involved and an excessive amount of resorption occurred. If there is an associated periodontal (gum) disease in later years the longevity of the teeth can be threatened. It is difficult, if not impossible, to predict who is susceptible to root resorption.

The incidence seems to increase with prolonged treatment. This emphasises the importance of patient cooperation. It is important to complete treatment efficiently.
It should be noted that not all root resorption arises from orthodontic treatment. Many patients have root resorption prior to orthodontic treatment. Trauma, impaction of adjacent teeth, endocrine disorders, drugs or idiopathic (unknown) reasons can also cause root resorption.

5. Loss of Tooth Vitality

Discolouration and/or loss of tooth vitality is rarely related to orthodontic treatment, but may occur during the treatment. An undetected non-vital tooth, whether caused by trauma in the past or a tooth having had extensive restorative treatment, may "flare up" during treatment.

Endodontic (root canal) treatment is then necessary to maintain the health of the involved tooth. Usually a tooth treated with a root canal filling can be moved orthodontically. A discoloured tooth may need to be bleached to restore a more natural colour after orthodontic treatment.

6. Jaw Joint Pain and/or Clicking

Jaw joint (temporo mandibular joint, or "TMJ") pain or clicking may occur at any time during one's life. Usually a combination of factors is involved in causing this problem. A history of jaw injury or emotional stress is a common precursor and it more often affects females. In most instances, jaw muscle spasms are the
cause of the pain. In some cases, actual joint pathology such as arthritis may be present.

The pain and/or clicking may fluctuate with the emotional state of the individual. Treatment of the problem may take several courses and can be very simple or very complex. Jaw joint pain may be treated as a medical disorder and not necessarily a dental disorder.

The patient should inform the orthodontist if there are problems with the jaw joint.

7. Tooth Attrition and Enamel Loss

The wearing of the biting surfaces of the teeth is usually, but not always found on adult patients. It is usually due to the patient grinding or clenching their teeth causing excessive wear of the enamel surfaces of the teeth. In younger patients, it is frequently related to high consumption of soft drinks, sports drinks or other acidic drinks.

Tooth interferences during jaw movements can also contribute to tooth wear. The patient unconsciously tries to eliminate the interferences or high point on the tooth by "working" the teeth.

This grinding and/or clenching wears the biting surfaces of the teeth down. This same process is seen in children with certain types of malocclusions (bad bites) such as crossbites, open bites, deep bites and certain skeletal discrepancies. When teeth are moved, the bite is constantly changing and, thus during treatment, new interferences are occurring almost monthly.

Patients with deep bites may also wear the edges of the upper front teeth on the lower braces. This is monitored and the patient should inform the orthodontist if they are concerned about excessive wear.

8. Injuries During Actual Treatment Procedures

When instruments are used or placed in the mouth, it is possible that the patient may be inadvertently scratched or poked, especially if the patient moves at a critical time during the procedure. It is possible for a foreign object to fall in the back of the mouth and be swallowed or inhaled. Great care is taken when
placing and removing the braces or bonding attachments.

Teeth previously weakened by trauma, restorative procedures or containing undetected cavities or weak fillings may be damaged during these procedures.

9. Relapse Tendencies

Teeth may have a tendency to change their position after treatment and this is termed "relapse". Proper wearing and/or maintenance of retainers should reduce this tendency. Throughout life, the bite can change adversely from various causes, such as eruption of wisdom teeth, genetic influences which control the size of the tongue, teeth and the jaws, growth and/or maturational changes, mouth breathing, playing of musical instruments and other oral habits - all of which may be beyond

the control of the orthodontist.

It is probable that all patients will experience at least some movement of the teeth once the braces have been removed. It is difficult to determine how much tooth movement will occur hence the importance of a good retention plan.

It appears that the more ideal the end result, the less likely the chances of the teeth moving. Good cooperation and patience to achieve the perfect result during the orthodontic treatment with braces therefore affects the post treatment changes.

The more severe the original orthodontic problems, the greater the relapse tendency. When a tooth is severely rotated, the gum fibres will tend to pull it back toward the rotated position. In some cases, cutting of the superficial elastic fibres (fibreotomy) is recommended as part of the retention procedure.

Occasionally a person's growth can become disproportionate. The relationship of the upper to lower jaws and teeth can be affected and original treatment objectives may have to be compromised. Skeletal growth disharmony is a biological process beyond the orthodontist's control. The treatment of relapse due to growth depends on the relapse. In some instances, it may be necessary to have orthodontic treatment again once growth is complete.

10. Additional Records and X-Rays

During the course of treatment, additional x-rays will be required to monitor the treatment progress.

11. Retention

The purpose of retainers is to hold the teeth in the corrected positions while the bone, gums and muscles adapt to the new arrangement. Teeth move throughout life so if no change to the finished result is desired then maintenance of the fixed retainers or intermittent wear of removable retainers on a long term basis is advised.

TEETH SHIFT WITH AGE. IT ALL SHIFTS WITH AGE.

Retainers are fitted once the braces are removed. This phase of treatment is just as important as the period of wearing braces.
There are several different types of retainers and the type selected for the individual patient is explained at the treatment planning appointment and also at the final stages of the braces. The two main types are fixed retainers or removable retainers.

Fixed retainers are wires that are bonded to the tongue side of the lower teeth or the palatal side of the upper teeth. Good oral hygiene using floss and correct toothbrushing technique are essential as are regular checks with a dentist.

Removable retainers are taken out when eating and for brushing. They are cleaned using cold water and toothpaste and can be soaked in denture cleaning solutions such as "Polident" which is available at chemists and supermarkets. Removable retainers are worn full time initially then can be reduced to night time wear
only when advised by your orthodontist.

Appointments with your orthodontist to check the retainers are scheduled at three, six or twelve months for a period of two years after removal of the braces.

CONCLUSION

The intention of this brochure is to inform patients of the potential problems that exist whilst undergoing orthodontic treatment. Many of the problems or conditions mentioned in this brochure occur only occasionally or rarely. There may be other inherent risks not discussed in this brochure. Every effort is made to address any problems that occur before, during or after treatment. Referral to another specialist practitioner may be necessary.

Patients should feel free to inquire about any aspect of their treatment. Understanding and cooperation are absolutely essential for ideal results that both the patient and the orthodontist wish to achieve.

Failure to wear elastics exactly as instructed could m

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2. Swollen Gums and Periodontal (gum and bone)

Problems
In some areas of the mouth the appliances may impinge or press on the gum tissue. This is usually not a problem, but if the patient does not brush well in the area, the gum tissue may become swollen. It is necessary that the gums and teeth be brushed and cleaned thoroughly after eating to keep them healthy. The patient should contact our receptionist if the problem persists or worsens.

We do know that some individuals are more prone to developing gum problems than others. Factors that can contribute to this problem are inadequate oral hygiene, accumulation of plaque and debris around the teeth and gums, incorrect brushing procedures, mouthbreathing and the general health of the patient.

Periodontal disease is cyclical. It may remain inactive for long periods of time and then flare up into an active state for no apparent reason. If the flare up occurs during the course of orthodontic treatment, it may be difficult to or even impossible to control the degree of bone loss and teeth could be lost. This is rare, but it can happen.
Your orthodontist may recommend referral to a periodontist (gum disease specialist) for evaluation of various conditions. In some cases, particularly in adults, the orthodontist may request that the patient regularly see a periodontist during the entire course of orthodontic treatment.

Occasionally, it may be necessary to move teeth into an area where there is less bone support for the teeth. This could lead to recession of the gums around the teeth involved and the need for periodontal surgery.

3. Impacted Teeth

Teeth which stay partially or completely under the gum are called “impacted”. Most teeth become impacted as a result of what is known as “ectopic (misdirected) eruption pattern” due to crowding of the teeth or a small jaw size. The treatment of an impacted tooth depends on the cause and the relative importance of the tooth.
The most commonly found impacted teeth are third molars or “wisdom teeth”. These teeth do not erupt properly into place due to insufficient room in the jaws. The orthodontist may request that these teeth be extracted before or after orthodontic treatment. Occasionally impacted wisdom teeth will have to be extracted at a very early age if they are causing damage to adjacent teeth or are blocking the eruption path of the other teeth.

If it is decided to move the impacted tooth into proper alignment by orthodontic means, it will require the aid of an oral surgeon or periodontist to expose the impacted tooth, to which an attachment is secured. This will provide a “handle “ from which a force is applied, gradually moving and guiding the tooth into position. This is usually performed for impacted canines.

The length of time required to move an impacted tooth can vary considerably. Factors include the difficulty of diagnosing the exact angle and position of the tooth, physical or mechanical limitations with guiding the tooth in the desired direction, or because of the nature and amount of bone and gum tissue present in the site to which the tooth is to be moved. These are not readily predictable factors, therefore an estimate of the treatment time could be inaccurate!

The roots of adjacent teeth can be damaged by the presence of an impacted tooth and/or orthodontic movement of the impacted tooth. The incidence is low and seldom severe. Referral for a 3D CT (computer tomogram) is sometimes recommended to accurately locate an impacted tooth relative to the adjacent teeth. This information is often invaluable in deciding the treatment plan.

In some instances, the impacted tooth may be fused to the bone (“ankylosed”) and will not move. It is not known if a tooth is ankylosed until a force is applied to try to move it.

4. Root Resorption

This condition involves shortening of the root tip of one or more teeth which may occur to varying degrees during orthodontic treatment, but is usually mild and does not affect the health or longevity of the teeth. The upper incisors (front teeth) are most commonly involved. There have been instances where all teeth are involved and an excessive amount of resorption occurred. If there is an associated periodontal (gum) disease in later years the longevity of the teeth can be threatened. It is difficult, if not impossible, to predict who is susceptible to root resorption.

The incidence seems to increase with prolonged treatment. This emphasises the importance of patient cooperation. It is important to complete treatment efficiently.
It should be noted that not all root resorption arises from orthodontic treatment. Many patients have root resorption prior to orthodontic treatment. Trauma, impaction of adjacent teeth, endocrine disorders, drugs or idiopathic

(unknown) reasons can also cause root resorption.

5. Loss of Tooth Vitality

Discolouration and/or loss of tooth vitality is rarely related to orthodontic treatment, but may occur during the treatment. An undetected non-vital tooth, whether caused by trauma in the past or a tooth having had extensive restorative treatment, may "flare up" during treatment.

Endodontic (root canal) treatment is then necessary to maintain the health of the involved tooth. Usually a tooth treated with a root canal filling can be moved orthodontically. A discoloured tooth may need to be bleached to restore a more natural colour after orthodontic treatment.

6. Jaw Joint Pain and/or Clicking

Jaw joint (temporo mandibular joint, or "TMJ") pain or clicking may occur at any time during one's life. Usually a combination of factors is involved in causing this problem. A history of jaw injury or emotional stress is a common precursor and it more often affects females. In most instances, jaw muscle spasms are the cause of the pain. In some cases, actual joint pathology such as arthritis may be present.

The pain and/or clicking may fluctuate with the emotional state of the individual. Treatment of the problem may take several courses and can be very simple or very complex. Jaw joint pain may be treated as a medical disorder and not necessarily a dental disorder.

The patient should inform the orthodontist if there are problems with the jaw joint.

7. Tooth Attrition and Enamel Loss

The wearing of the biting surfaces of the teeth is usually, but not always found on adult patients. It is usually due to the patient grinding or clenching their teeth causing excessive wear of the enamel surfaces of the teeth. In younger patients, it is frequently related to high consumption of soft drinks, sports drinks or other acidic drinks.

Tooth interferences during jaw movements can also contribute to tooth wear. The patient unconsciously tries to eliminate the interferences or high point on the tooth by "working" the teeth.

This grinding and/or clenching wears the biting surfaces of the teeth down. This same process is seen in children with certain types of malocclusions (bad bites) such as crossbites, open bites, deep bites and certain skeletal discrepancies. When teeth are moved, the bite is constantly changing and, thus during treatment, new interferences are occurring almost monthly.

Patients with deep bites may also wear the edges of the upper front teeth on the lower braces. This is monitored and the patient should inform the orthodontist if they are concerned about excessive wear.

8. Injuries During Actual Treatment Procedures

When instruments are used or placed in the mouth, it is possible that the patient may be inadvertently scratched or poked, especially if the patient moves at a critical time during the procedure. It is possible for a foreign object to fall in the back of the mouth and be swallowed or inhaled. Great care is taken when placing and removing the braces or bonding attachments.

Teeth previously weakened by trauma, restorative procedures or containing undetected cavities or weak fillings may be damaged during these procedures.

9. Relapse Tendencies

Teeth may have a tendency to change their position after treatment and this is termed "relapse". Proper wearing and/or maintenance of retainers should reduce this tendency. Throughout life, the bite can change adversely from various causes, such as eruption of wisdom teeth, genetic influences which control the size of the tongue, teeth and the jaws, growth and/or maturational changes, mouth breathing, playing of musical instruments and other oral habits - all of which may be beyond the control of the orthodontist.

It is probable that all patients will experience at least some movement of the teeth once the braces have been removed. It is difficult to determine how much tooth movement will occur hence the importance of a good retention plan.

It appears that the more ideal the end result, the less likely the chances of the teeth moving. Good cooperation and patience to achieve the perfect result during the orthodontic treatment with braces therefore affects the post treatment changes.

The more severe the original orthodontic problems, the greater the relapse tendency. When a tooth is severely rotated, the gum fibres will tend to pull it back toward the rotated position. In some cases, cutting of the superficial elastic fibres (fibreotomy) is recommended as part of the retention procedure.

Occasionally a person's growth can become disproportionate. The relationship of the upper to lower jaws and teeth can be affected and original treatment objectives may have to be compromised. Skeletal growth disharmony is a biological process beyond the orthodontist's control. The treatment of relapse due to growth depends on the relapse. In some instances, it may be necessary to have orthodontic treatment again once growth is complete.

10. Additional Records and X-Rays

During the course of treatment, additional x-rays will be required to monitor the treatment progress.

11. Retention

The purpose of retainers is to hold the teeth in the corrected positions while the bone, gums and muscles adapt to the new arrangement. Teeth move throughout life so if no change to the finished result is desired then maintenance of the fixed retainers or intermittent wear of removable retainers on a long term basis is advised.

TEETH SHIFT WITH AGE. IT ALL SHIFTS WITH AGE.

Retainers are fitted once the braces are removed. This phase of treatment is just as important as the period of wearing braces.
There are several different types of retainers and the type selected for the individual patient is explained at the treatment planning appointment and also at the final stages of the braces. The two main types are fixed retainers or removable retainers.

Fixed retainers are wires that are bonded to the tongue side of the lower teeth or the palatal side of the upper teeth. Good oral hygiene using floss and correct toothbrushing technique are essential as are regular checks with a dentist.

Removable retainers are taken out when eating and for brushing. They are cleaned using cold water and toothpaste and can be soaked in denture cleaning solutions such as “Polident” which is available at chemists and supermarkets. Removable retainers are worn full time initially then can be reduced to night time wear
only when advised by your orthodontist.

Appointments with your orthodontist to check the retainers are scheduled at three, six or twelve months for a period of two years after removal of the braces.

CONCLUSION

The intention of this brochure is to inform patients of the potential problems that exist whilst undergoing orthodontic treatment. Many of the problems or conditions mentioned in this brochure occur only occasionally or rarely. There may be other inherent risks not discussed in this brochure. Every effort is made to address any problems that occur before, during or after treatment. Referral to another specialist practitioner may be necessary.

Patients should feel free to inquire about any aspect of their treatment. Understanding and cooperation are absolutely essential for ideal results that both the patient and the orthodontist wish to achieve.

Failure to wear elastics exactly as instructed could mean many wasted months prolonging treatment time. Similarly, when Twin Block appliances, headgear or other removable appliances are used, it is expected that the appliance is worn as directed. Insufficient wear may require a change in treatment plan or objectives. The quickest, easiest way to achieve a healthy, beautiful smile is to wear appliances correctly, follow all instructions and keep your appointments.

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