INFORMED CONSENT— AN ESSENTIAL PART OF ORTHODONTIC RECORDS

by Dr. Brock H. M. Rondeau

The purpose of this article is to provide the orthodontic practitioner with a basic understanding of the concept of informed consent and why this must become an essential part of the orthodontic records. At the end of this dissertation, I have enclosed a sample of my **"Information and Informed Consent Document"** which I encourage practitioners to use in their practices.

Malpractice insurance carriers tell us that the probability exists that every health professional will be sued sometime during his/her professional career. Therefore, it is important that we not only take courses to improve our orthodontic skills, but also ones that increase our understanding of legal matters. We must increase our knowledge of risk management so that we might be able to minimize the possibility of being sued as well as reduce the likelihood of losing a lawsuit should it occur.

To this end, I wrote an article on **"Risk Management"** which appeared in the July-August 1991 issue of *The Functional Orthodontist*. As I mentioned in this article, I think the dental profession may be facing a crisis in dental litigation similar to the one experienced by the medical profession 15 years ago. One of the main reasons the medical profession has now reduced the number of malpractice suits is that it has learned how to practice "defensive medicine" in terms of taking and maintaining excellent records. Hopefully, the dental profession will learn from this and will strive to improve their record keeping system, including informed consent agreements, and to improve communications with their patients. If they fail to do so, I believe the results will be devastating!

I think it should be of some concern to the dental profession that according to *U.S.A. Today*, April 19, 1991, law firms spent $94.8 million last year to advertise their services on television. This was a 15% increase from 1989. Many of these ads were directed against patients who suffered personal injuries. These would also include patients whose TMJ symptoms had increased and whose profiles had worsened as a result of orthodontic treatment.

It is a well known fact that one of the growth areas that lawyers are presently pursuing is the field of dentistry, including TMJ and orthodontics. One has only to read some of the legal publications (e.g. *Trial Magazine*) for substantiation of this fact. As I mentioned in the article on **"Risk Management"**, lawyers are hiring dentists and dental consultants to help them become better educated in the area of dentistry.

Along this line, there are presently 15 dentists enrolled in the law program at St. Louis University. This is just one law school in one city in the U.S. What is happening at other law schools across North America? The dental profession can no longer remain complacent about the importance of legal matters. We must strive to better understand how the legal system functions and how we can protect ourselves so that we are then free to practice our chosen profession without the fear of being sued.

There are a number of things which the prudent practitioner must know about informed consent and risk management in order to protect himself, his practice, and his family.

At this point, let us define three terms: **consent, implied consent, and informed consent.**

Consent

The patient's right to self determination. A dentist who treats a patient without the patient's consent may be liable for committing the civil wrong (tort) of battery, the **unlawful** touching of another person without consent.

Example—A 1905 medical case, **Mohr v Williams**, determined this legal point. The patient had consented to an operation on the right ear; however, once the patient was anesthetized, the surgeon decided that the condition of the left ear was worse and proceeded to correct the problem. The patient sued the surgeon for lack of consent. In awarding damages, the court first considered the benefit to the patient and the good intention of the surgeon. In this case, the court felt that although the medical treatment was necessary, properly performed, and beneficial to the patient, proper consent for the second operation was not obtained. Therefore, the surgeon was guilty of battery.

The courts look upon orthodontic treatment as being a very time-consuming, expensive and complicated procedure. The patient has a right to self-determination when it comes to making decisions on how his or her body should be treated. Therefore, the orthodontic practitioner must obtain an "Informed Consent", prior to the initiation of any orthodontic treatment.

Implied Consent

Implied consent is defined as a voluntary act by which one person agrees to allow someone else to do something. Specific to dentistry, the patient authorizes the dentist to perform a specific procedure.

Example—A patient arrives at the office for her dental appointment and is summoned to the dental chair. The dentist arrives in the operatory, hastily examines the chart, and then starts treatment. The dentist **assumes** that the patient's position in the dental chair indicates that she wants to be treated. This is known as "implied consent". The dentist may or may not explain to the patient what procedure is being performed. This does not establish any level of communication between the dentist and the patient, and may lead to problems later on if there are any problems with the treatment rendered.

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Informed Consent

Informed consent is consent given after disclosure of all information which is sufficiently accurate and complete so that a reasonable, competent person can make an intelligent decision on their future treatment. The legal doctrine of informed consent began in 1957 when a California court determined that the consent obtained was invalid unless the patient actually understood the proposed treatment and the associated risks involved. The question always arises: are patients or parents of minors equipped to handle the complex and technical issues that determine the proper treatment plan for an orthodontic case? Orthodontic practitioners may not think so, but the law disagrees. Legally, the patient must be given enough information to make a rational, informed decision regarding the orthodontic treatment. It is very unwise for any treatment to start without the patient's total agreement and cooperation.

Oral Surgeons and Informed Consent

In dentistry the concept of informed consent started with an oral surgeon performing third molar extractions.

Example—In 1982, in the British Columbia case of **Rawlings v Lindsay**, the oral surgeon gave the patient a general warning of the risk of nerve damage during extraction of third molars. The court held that the oral surgeon had not warned the patient sufficiently that the nerve damage might be permanent, or that other unpleasant sensations might occur if nerve damage was sustained. The court found that, after the testimony of expert witnesses, there is nerve damage in five to ten percent of these cases and that the symptoms are serious. The oral surgeon was found guilty of not adequately explaining all of the risks and complications to the patient. When the court asked the patient if he would have proceeded with the operation had he been properly advised regarding the risks, he said he would not. This appears to be the answer that is given consistently if there is lack of informed consent. As a result of this case and others, oral surgeons are being advised by their professional associations to use an informed consent document prior to surgery. In some cases, these forms must be used in order for their malpractice insurance to be valid.

In my opinion, obtaining informed consent is just as relevant with orthodontics as it is with oral surgery, and I recommend that each practitioner properly explain and obtain the patient's signature on an informed consent document prior to any treatment being instituted.

Criteria for Informed Consent

There are specific requirements set out in judicial decisions as to the extent of the information that must be given to an orthodontic patient in order for the patient to make an intelligent decision regarding the giving of consent for treatment.

1. The diagnosis and treatment plan must be thoroughly explained.
2. What are the benefits of treatment?
3. What are the risks of treatment?
4. What are the alternate treatment plans?
5. What is the prognosis if nothing is done?
6. The information must be presented in an organized, systematic and easily understood manner.
7. Document must be signed by the patient.

Informed consent cannot be thought of as just a document, but rather as a procedure. It is not the signing of the piece of paper that makes the consent valid, but rather the inclusion of all of the criteria as listed above. The document merely serves as legal proof that indeed discussions did take place regarding the patient's proposed orthodontic treatment and that the patient did consent to treatment after being properly informed, as evidenced by the signature on the document.

Diagnosis and Treatment Plan

Since orthodontics is such a time-consuming procedure which can take several years, it is important that all details of the problem and its treatment plan be **thoroughly** explained to the patient. This must be done at a special treatment conference and the **patient must play an active role** in the formation of the treatment plan. To help the patient understand the proposed treatment, I recommend that samples of all orthopedic appliances and types of fixed appliances (colored ligature ties) be available. The patient must play an active role in the formation of his individualized treatment plan. By encouraging the patient to participate in this discussion, you are not only complying with one of the written requirements of the informed consent procedure, but you are also enhancing the level of communication. Once agreed upon, the treatment plan must be recorded on the document in layman's terms.

Example—

Phase I	Upper Expansion Appliance rather than Maxillary Schwarz Plate
Phase II	Rick-A-Nator Appliance to move lower jaw forward
Phase III	Braces rather than Straight Wire Appliance

Alternate Treatment Plans

There is always more than one way to treat an orthodontic case. The conventional approach may involve bicuspid extractions or cervical facebow headgear, which usually results in a face that appears somewhat flattened. Sometimes this approach may also result in increased signs and symptoms of TMJ. Conversely, the functional approach is usually instituted at an earlier age and is essentially a non-extraction technique. This approach employs arch expansion appliances, functional appliances to advance the mandible, and often results in a much improved profile and a fuller facial appearance. My clinical experience has been that this approach usually results in a reduction of TMJ signs and symptoms. Whichever approach the clinician chooses, he should discuss all treatment philosophies and techniques with the patient prior to treatment.

Limitation of Treatment
Several factors can result in limitations to the success of your treatment.
a) Severe skeletal problems
b) Cooperation problem
c) Relapse problems
d) Type of malocclusion
e) Severity of the malocclusion

Patients must be informed that orthodontics is not a perfect science and that orthodontic results may not last a lifetime. The clinician cannot always obtain an ideal result and must make the patient aware of the reasons prior to treatment. It is important that the patient be informed that you will strive to obtain a significant improvement and that while perfection is a goal in orthodontics, it is frequently not a reality.

Example—Class III skeletal, retrognathic maxilla, normal mandible, normal vertical, female, age 8. In this case, I would recommend that Phase I treatment only be instituted involving the Maxillary Anterior Sagittal Appliance with Reverse Headgear. Parents would be informed that this appliance will help develop the maxillary arch to:
1. Eliminate the need for extraction of permanent teeth in the upper arch.
2. Improve the appearance of the patient by moving the premaxilla anteriorly.
3. Reduce the likelihood of orthognathic surgery on the maxillary arch.

This must be clearly written on the informed consent document so that your objectives are clearly stated prior to the treatment. A notation must also be made that this case will be re-evaluated in the future and that the possibility still exists that this patient may need orthognathic surgery involving the lower jaw.

Prognosis if No Treatment Plan
The practitioner must inform the patient honestly what he feels the consequences will be if the patient decides not to proceed with treatment. Obviously the answer would relate directly to the severity of the malocclusion.

Example—If the malocclusion is mild and the patient has a slightly crowded Class I malocclusion with no significant TMJ signs or symptoms, the prognosis if no treatment was done is good. Patients presenting with the following clinical conditions could have a poor prognosis if not treated:
1. Airway problems.
2. Constricted maxillary arches with posterior crossbites.
3. Class II Div 2 malocclusions with serious TMJ signs and symptoms.
4. Class III malocclusions with underdeveloped maxillas. (antero-posteriorly and transversely)
5. Deep overbites with TMJ signs and symptoms.
6. Anterior crossbites.
7. Class II Div 1 malocclusions with retrognathic mandibles, exhibiting signs and symptoms of TMJ.

Benefits of Treatment
The patient is entitled to know that if he consents to treatment what are likely to be the benefits. Some benefits may include a pleasing smile, straight teeth, improved nasal breathing, less TMJ symptoms, improved profile, improved appearance, self-esteem, etc.

Risks of Treatment
The discussion of possible risks that could arise with orthodontic treatment is one of the **essential** parts of the informed consent procedure. Some risks may include increased caries, periodontal disease and decalcification if the oral hygiene is not maintained. Another risk could involve the loss of tooth vitality especially in cases where the tooth was injured previously. Other risks include root resorption, TMJ problems, relapse possibilities, and the possibility of orthognathic surgery in extreme skeletal deformities.

In the event of a functional problem such as an anterior tongue thrust, the patient must be made aware of the fact that the final result may be an anterior open bite. The patient must be made aware of the importance of eliminating noxious habits such as thumbsucking or the finished orthodontic result will not be stable and will relapse.

In the case of periodontal problems or TMJ problems that are present before treatment, this must be documented fully and discussed at length prior to treatment. Prior to the eruption of an impacted cuspid the problems of root resorption, ankylosis and extended treatment time must be discussed. Sometimes the risks are so severe that the patient will decide against the procedure. When discussing these risks it is important to **discuss each one** individually and to tell the patient of the significance of each.

Presentation of Information
The information must be presented in an organized and systematic manner. This must be done in language that the patient understands and technical dental terminology must be avoided. The treatment plan must be clearly written in layman's terms on the informed consent document. If your document is ever challenged in court, one of the criteria which would be used to judge it will be: was it written in layman's terms so that the patient could easily understand its contents?

Patient Asks Questions
One of the main purposes of the informed consent procedure is that it allows the practitioner to communicate effectively with the patient in such a manner that the patient is encouraged to participate in the discussion by asking questions. The atmosphere must be relaxed and one in which the patient feels comfortable about asking questions. Ideally, the treatment conference is scheduled for 45 to 60 minutes at the end of the day when there will be no interruptions and all interested parties may attend. If the patient is a minor, it is important to have both parents present at the consultation appointment to improve communication and avoid future confusion and possible problems.

Verification of the Document
It is absolutely essential that, once the informed consent procedure is completed as outlined in the steps above, the patient sign the document indicating acceptance of the proposed treatment plan. Dr. Duane Keller, who has been a dental consultant for several insurance companies involved in numerous dental malpractice cases, recently made the statement, "If it is not written in the legal record, it did not happen". In the eyes of the court, a verbal informed

consent is impossible to prove and is therefore not as valid as one which is written.

The best verification that a discussion took place regarding the orthodontic treatment plan is the signature of the patient on the document itself. Therefore, in an effort to avoid future problems, do not start any orthodontic treatment until after this informed consent document has been signed by the patient. The importance of customizing each document to reflect the different treatment plans and clinical conditions cannot be overemphasized. This is absolutely vital to the validity of the document. Similar to any legal document, each change that is made must be appropriately initialed by the patient or parent. After all parties have read, understood, and signed the document, a copy should be given to the patient and/or parent so they might have a permanent record of what was discussed and agreed upon. The original document is kept as part of your legal records.

Continuance of Informed Consent

It is important for the practitioner to realize that the informed consent procedure **does not end** with the signing of the document. This procedure is only the beginning of doctor-patient communication, which must continue throughout treatment. Any problems that arise during treatment must be discussed with the patient, including any changes in the underlying systemic medical condition, any alterations in the level of cooperation, any negative environmental factors, root resorption, ankylosis, etc. In order to avoid problems in the future, you must keep the patient and parents informed at all times and record **all** conversations on the treatment chart.

It should be noted that no patient is pleased if a complication occurs. However, a patient who is properly informed in advance may react in a more favorable manner.

Criteria for Informed Consent to be Valid

a) Mentally Competent—The patient or the parent who is giving the consent must be mentally competent.

b) Minor—In the case of a minor, consent may be given by the parents or the legal guardian. The minor reaches the age of majority usually at age 18.

c) Voluntary—The consent must be given freely and voluntarily by the patient. Consent which is forced or obtained through coercion, misrepresentation, or fraud is not valid. To ensure that this procedure is indeed voluntary, I recommend reviewing the informed consent document with the patient or parent at the treatment conference. It should then be taken home, reviewed again carefully, and when all parties are satisfied, the document should be signed and returned to the office prior to the initiation of the orthodontic treatment.

d) Consent to treatment performed—The treatment to which the patient consents **must be the treatment which is performed**. Any additional treatment must not be covered under the original consent. If the treatment changes, these changes must be discussed with the patient and agreed to before proceeding. These conversations must be recorded and appropriately dated on the patient's chart to further validate the informed consent obtained.

e) Emergency treatment—The only exception to the above is emergency treatment which does not require any consent.

Summary

Question: What is informed consent?
Answer: Informed consent means properly explaining the problems of the case to the patient so they fully understand the benefits, risks, and treatment options, in order to make a reasonable decision whether to proceed with treatment.

Question: Why should it be used?
Answer: a) First, it helps establish an atmosphere of good communications and understanding between the patient and the practitioner.

b) Second, if the patient is not properly informed about the possible risks of treatment and something goes wrong, a tort has been committed and a lawsuit will likely follow.

Question: What are the criteria for informed consent?
Answer: The courts have been very specific as to what essential criteria must be included in all informed consent documents. These include: diagnosis and treatment plan; benefits of treatment; risks of treatment; limitations of treatment; alternate treatment plans; prognosis with no treatment; information presented in layman's terms, and opportunity for questions.

Question: How should informed consent be incorporated into my practice?
Answer: It must be part of your legal records. Every patient should have the informed consent document presented at the treatment conference, and sign the document prior to the initiation of any orthodontic treatment.

Conclusion

Many dentists become very uncomfortable when legal matters are discussed. Should dentists fear the legal system?
Question: Are you afraid of policemen? The **answer** depends on whether or not you are a law abiding citizen. If you know, understand and obey the laws, you have nothing to fear from either the policeman or the legal system. The dental profession must accept the fact that there is a legal system set up to protect the public and the dentist should make more of an effort to understand that system in order to work safely and effectively within it. The question arises: is the law threatening dentistry, or is the law challenging dentistry to rise to a higher level of professionalism?

You need to understand the legal profession's obsession with records. If your records are incomplete or if you do not have an informed consent document, you are indeed increasing your chances of receiving a malpractice suit. It is unfair for the dental profession to take out its frustration on the legal profession. Remember, just as some lawyers are trained to protect patients' rights, others are trained to help defend and protect dentists.

Informed consent could be a blessing in disguise. It should be used as an aid

to patient education and improved communication. Rather than assume a defensive attitude in practice, a more positive approach is to use this informed consent to both the dentist's and the patient's advantage. This is best accomplished by enhancing the patient's understanding of their orthodontic problems, the benefits of corrective therapy, the possible risks of treatment, and the viable alternatives. At the end of the treatment conference, the patient has an open and honest relationship with the dentist which sets the stage for the next three years of treatment.

Whether we as a profession like it or not, this is the age of human rights and professional accountability. It is time to reorganize your office and add informed consent to your routine treatment of orthodontic patients. The law of informed consent not only ensures the patient's right to determine what course of treatment is to be undertaken, but also evaluates the professionalism of the practicing dentist.

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INFORMATION AND INFORMED CONSENT DOCUMENT

—— by Dr. Brock H.M. Rondeau ——

PATIENT'S NAME _____

DEAR _____,
(Patient or Parent's Name)

We ask you to read the following to share with you some facts about orthodontic treatment which, like any medical or dental treatment, includes some limitations. This information is routinely supplied to anyone considering orthodontic treatment in our office.

Informed consent is a requirement facing all medical and dental practitioners. It is the responsibility of my staff and myself to provide each patient with enough information so that the patient has an understanding of the extent of the problem, benefits of treatment, risks of treatment, treatment alternatives and consequences if no treatment is performed.

Orthodontics is an elective procedure, therefore we want you to read the following information and ask myself or my staff any questions. After you are completely satisfied with our explanations, consent to treatment by signing this "Informed Consent Document". This is standard procedure in our office.

The purpose of this document is to inform the patient and/or the parents of what they may expect during orthodontic treatment to point out the potential risks or problems that may be encountered before or after treatment. Some facts which must be considered include:

1. Patient Copperation

As a rule, excellent orthodontic results can be achieved with informed and cooperative patients. Patient cooperation is one of the most important factors in determining whether treatment is completed on time. The key to successful treatment is a joint effort by the patient, parents, orthodontic practitioner and the staff working together.

To help achieve the most successful results, the patient must do the following:

a) Keep regularly scheduled appointments.
b) Practice good oral hygiene, including brushing, flossing, etc.
c) Wear orthodontic appliances as indicated.
d) Wear elastics if necessary.
e) Eating proper foods so as not to dislodge the braces (brackets, bands).
f) Wear retainers after braces are removed.

Failure to adhere to instructions can lengthen the treatment time and can adversely affect the quality of the treatment results. In extreme circumstances, it could be necessary to discontinue orthodontic treatment.

2. Cavities, Swollen Gums, White Spots

Orthodontic appliances do not cause cavities or swollen gums, but because of their presence, food particles and dental plaque are retained and the potential for problems is increased. Cavities, swollen gums and white spots (decalcification) can result from lack of brushing and flossing and poor oral hygiene, and need not occur if good oral hygiene procedures are closely followed. The permanent white lines (decalcification) that are sometimes visible around the area of the brackets signal the early stage of a cavity. Sugary foods and between meal snacks should be eliminated. If a bracket or band becomes loose, the patient must return to the office as soon as possible, otherwise the possibility for a cavity exists. Missed appointments could result in tooth damage due to undetected loose bands.

In addition to regular monthly visits for orthodontic work, we suggest that orthodontic patients see their dentist at least twice a year for periodic examination and cleaning.

3. Loss of Tooth Vitality

Loss of tooth vitality (nerve within the tooth dies) can occur with or without orthodontic treatment, as it is usually related to a previous injury to the tooth and may even be a result of a large cavity or large filling in a tooth. The tooth usually discolors and requires root canal treatment in order to maintain the health of the tooth.

4. Tooth Resorption

Progressive shortening of the roots of certain teeth may occur in some individuals with or without orthodontic treatment. This is a negative side effect that occurs rarely with fixed appliances or braces. Root shortening (root resorption) can be caused by trauma, injury, excessive forces, impaction of teeth, prolonged treatment and hormonal imbalances. Certain patients seem more predisposed to root resorption than others, and no one seems to know exactly why, nor can one predict for certain when it will occur. Slight root resorption usually presents no problems for patients who have normal root length and healthy gums and bone. If the patient has advanced gum disease with resultant loss of supporting bone, then root resorption could cause the tooth to be lost sooner.

5. Unfavorable Growth

In the case of younger patients, the treatment plan will be determined on the anticipated amount and direction of facial growth. On occasion, the facial growth does not occur as predicted, and it may be necessary to recommend a change in treatment objectives and procedures. Abnormal growth is a biological process and is beyond the dentist's control. Growth pattterns can be adversely affected by finger, thumb or tongue habits. Persistent mouth breathing (abnormal breathing pattern) may cause facial growth to occur in a more vertical direction. My philosophy is to treat problems early and non surgically. Only in extreme cases will jaw surgery be necessary to correct the problem.

6. Jaw Joint Problems (TMJ)

Some patients experience jaw joint (temporomandibular joint) problems prior to, during, and after orthodontic treatment. Usually multiple factors cause this condition. Some of the signs and symptoms of jaw joint (TMJ) include clicking, popping, limited mobility, and in severe cases, pain and locking of jaw. Many people experience these symptoms independent of orthodontic treatment and some are even referred for orthodontic therapy to correct these conditions. Occasionally, a patient may experience some of the jaw joint symptoms during the movement of the teeth in orthodontic treatment, but hopefully they will subside after treatment is completed.

However, jaw joint problems are not all "bite" related, as tension appears to play a role in the frequency and severity of jaw joint pains. The problems are more common in females and seem to get worse with age, and in many cases, muscle spasms are the cause of the pain. The emotional state of the person predisposed to this problem is a factor and the symptoms may fluctuate with the emotional stage of the individual.

During the records appointment, we attempt to determine the seriousness of the TMJ (jaw joint) problems and then try to minimize the signs and symptoms throughout the treatment. In some cases functional orthopedic appliances such as expansion appliances, lower jaw advancement appliances (Bio-Finisher, Rick-A-Nator, Anterior Sagittal Appliance, etc.) are helpful in preventing or treating these problems.

7. Enamel Reduction

Reshaping the teeth before, during, or after treatment may be recommended to provide room for alignment, improved appearance and stability. This reduction of the other layers of enamel seldom presents a problem with enamel integrity or causes any increase in the number of cavities.

8. Clear Braces (Ceramic Braces)

The use of ceramic braces may involve occasional breakage which could pose a risk to the patient if the particles are swallowed or aspirated. The enamel may fracture during the removal of the ceramic braces even when extreme care is exercised. If this happens, the tooth may require bonding to restore any defects. This is a rare occurrence and is seldom considered serious enough to contra-indicate treatment.

9. Tooth Size Discrepancy

If after orthodontic treatment, minor spacing occurs between the teeth because of small or abnormal teeth size, bonding (white filling material) may be suggested to fill in the spaces. This improves the estethics and stability of the case.

10. Treatment Time

The treatment time can vary with the difficulty of the problem, cooperation of the patient, and individual response to the orthodontic treatment. Lack of facial growth, poor cooperation with elastics or appliance wear, poor oral hygiene, broken appliances or missed appointments are all important factors which could lengthen treatment time and affect the quality of the results.

The normal treatment time with braces is about 24 to 30 months. However, this can vary considerably in some cases. This time period does not include "Phase I" treatment or the "Orthopedic Phase" (where the orthopedic appliances are utilized while some of the primary or "baby teeth" are still present).

11. Discontinuance of Treatment

Treatment will be discontinued for lack of patient cooperation, including poor oral hygiene, broken appointments, lack of wear-time of appliances or elastics, and in cases where, to continue the treatment, would unfavourably influence the dental health of the patient. Prior to the discontinuance of treatment, the patient or parent will be thoroughly informed of the reasons and hopefully will agree.

12. Relapse

Relapse has been described as a movement or shifting of the teeth back to their original position after the braces have been removed. It is probable that all patients may experience at least some movement of the teeth once the braces have been removed. In the late teens or early twenties, some patients may notice slight crowding of the lower front teeth. This is particularly evident if their teeth were extremely crowded prior to treatment. This minor relapse can occur even with good cooperation throughout the active and retention phases of treatment.

The problem of late crowding of the lower teeth occurs in many people with or without orthodontic treatment. Some reasons for crowding include the eruption of the wisdom teeth, the growth patterns of the jaws, or the muscle balance of the lips and tongue. Muscle balance plays an important role in the stability of the case. There must be a balance of the muscles of the lips and cheeks outside and the tongue inside.

Muscle instability can occur with patients with allergies involving swollen adenoids and tonsils who, therefore, must breathe through their mouths. If the patient has a persistent

tongue thrust swallowing habit, there will be a greater chance of relapse. Habits such as nail biting, thumb sucking, tongue thrusting, and mouth breathing can cause teeth to become crowded.

To minimize relapse, it is important to eliminate habits as well as wear the retaining devices as directed. Failure to wear retainers may result in undesirable tooth movement for which we cannot assume responsibility. It is important for patients to wear their retainers at all times, except while engaged in contact sports or cleaning the appliance.

13. Our Treatment Goal: The Best Treatment Possible

Our treatment objective is to always obtain the best treatment results possible. However, orthodontics is not a perfect science and, in dealing with problems of growth and development, genetics, stress, and patient cooperation, achieving an optimal result is not always humanly possible. No guarantees can be given as to the orthodontic finished result, as the retention and results depend too much upon patient cooperation and other factors beyond the dentist's control.

14. Proposed Treatment Plan

a) ACTIVE TREATMENT PLAN
   Phase I
   Phase II
   Phase III
   Phase IV

b) RETENTION PHASE

Dr. _____ has thoroughly explained to me the proposed treatment plan, the alternatives of treatment, as well as consequences if no treatment is done. I concur that I have been involved in the formation of the proposed treatment plan and that I am in agreement with the plan as described above.

15. Qualifications

I acknowledge that _____ is not an orthodontist, but rather a general dentist who has taken numerous post graduate courses in orthodontics. Dr. _____ attempts to stay abreast of all of the newer techniques in all phases of dentistry, including orthodontics, in an effort to provide the best possible treatment to his/her patients.

16. Permission To Use Photographs, X-Rays

I consent to the taking of photographs and x-rays before, during, and after orthodontic treatment as they are a necessary part of the diagnostic procedure and record keeping. I further give permission for the use of these photographs, x-rays and records to be used for the purpose of research, education or publication in professional journals.

17. Understanding "Information and Informed Consent Document"

We have attempted to explain some of the many potential problems that could arise as a result of orthodontic treatment. It would be impossible here or anywhere else to mention all the possible problems that could arise with orthodontic treatment or any other medical or dental treatment. Treatment of human biologic conditions will never reach a state of perfection despite technological advances. We will make every effort to cooperate with you during your treatment and keep you fully informed as to the progress of orthodontic treatment.

I, _____ (Patient or Parent) certify that this "Information and Informed Consent Document", outlining the general treatment considerations as well as the potential problems of orthodontic treatment, was presented to me and that I have read and understand its contents. I also understand that there could be other potential risks or problems that could arise that are not listed in this document. I further understand that, like other healing arts, the practice of orthodontics is not an exact science, and therefore cannot be guaranteed.

18. I, _____ (Patient or Parent), hereby acknowledge that I have been informed to my satisfaction of all the treatment considerations, including benefits of treatment, risks of treatment, risks of non-treatment, and the proposed orthodontic treatment plan and that I now consent to treatment.

Reviewed By: _____ (Dentist) ON _____ (Date)

_____ (Patient or Parent) ON _____ (Date)

Signed By: _____ (Dentist) ON _____ (Date)

Signed By: _____ (Patient or Parent) ON _____ (Date)

EDITOR'S NOTE:

This document should be customized for each individual patient. Special notes should be written into the document as it is reviewed by the patient and doctor. The patient or parent should initialize all changes, additions, notes or comments written into the Informed Consent document.