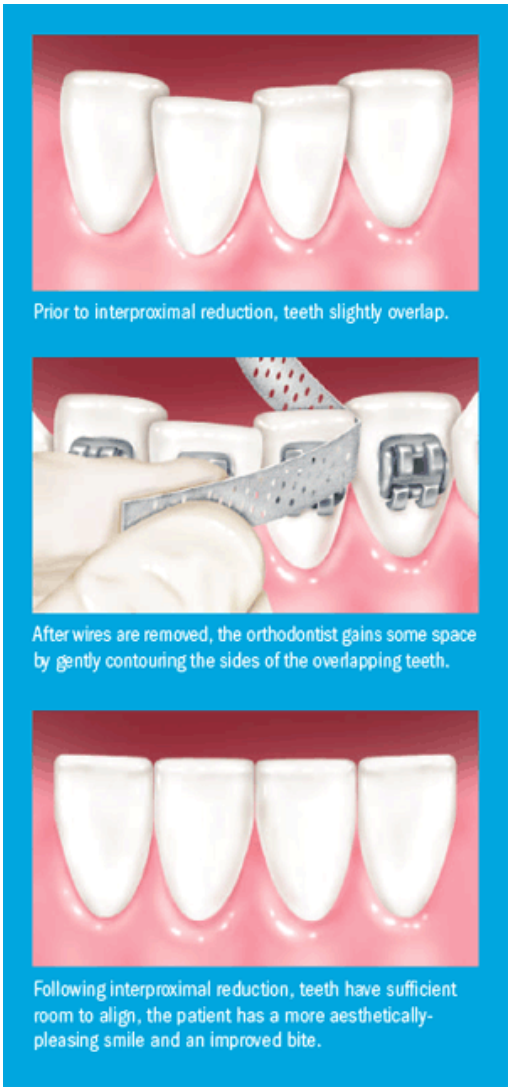
Consent to Teeth Slenderisation

What is teeth slenderisation?

Slenderisation (making teeth narrower) of teeth is variably called interproximal stripping (IPR), interproximal reduction, reproximation, selective reduction and air rotor stripping (ARS). This is a process where the dentist uses a single or a combination of tools to gently remove a minimal amount of the outer tooth tissue in enamel at the contact points of one to several teeth for the purpose of better tooth alignment, or improving the fit of teeth together, or when trying to broaden a contact point and bring teeth in closer proximity to eliminate triangular spaces between the teeth. This is not a new procedure. In-fact slenderisation of teeth has been carried out since the 1940s, particularly by orthodontists who were trying to avoid tooth extraction or increase the stability of tooth movement by broadening the contact points of teeth.



Prior to interproximal reduction, teeth slightly overlap.

After wires are removed, the orthodontist gains some space by gently contouring the sides of the overlapping teeth.

Following interproximal reduction, teeth have sufficient room to align, the patient has a more aesthetically-pleasing smile and an improved bite.

When considering the need for this reshaping procedure your dentist will consider such factors as the size and shape of your teeth, their positions and alignment, and your facial features, and how much tooth show exists.

The removal of tiny amounts of enamel generally causes no discomfort because there are no free nerve endings on the outer surface of the tooth. The procedure is normally carried out without anaesthesia. There is the possibility of short-term sensitivity which is managed by high fluoride tooth-pastes.

When is slenderisation carried out?

When embarking on orthodontic treatment to straighten teeth, there is sometimes a need to create space. Often in orthodontics, a decision is made to remove one to several teeth to create space to correct crowded teeth. When there is mild to moderate crowding (i.e. when the dentist can measure up to 8 mm of crowding between all the teeth in one jaw), this can often be resolved by a slenderisation procedure rather than having to suffer the complete loss of one or more healthy teeth.

Teeth slenderisation is a common procedure when straightening teeth using Invisalign aligners or when undertaking routine orthodontic treatment when the practitioner is seeking to avoid tooth extraction and create better alignment in a more stable tooth position.

Many adults who receive orthodontic treatment may have suffered some gum recession due to gum disease or the natural ageing process. As a result, when teeth are straightened, there are sometimes dark triangular spaces between the teeth. These can look unsightly. One way to reduce the impact of these 'black triangles' is to broaden their contact points by a slenderisation procedure and bring the teeth in closer contact.

Is this procedure damaging to teeth?

Most teeth have approximately 1 mm thickness of enamel. The slenderisation procedure will take away up to 0.25 mm of this enamel, but often much less. This may seem like a lot but in fact, during a life-time it is unlikely that teeth will wear very much at all at their contact points and so this thickness of enamel is not needed for health. This tooth reduction procedure must be considered a small trade off against the tremendous benefits of having straight teeth that may have more stable positions and be more readily cleansable.

Your clinician will ensure that this procedure is done properly. Whereas the teeth are initially slenderised with a coarse tool the teeth contours will need to be polished with fine strips to ensure smooth contours after the slenderisation procedure. When the procedure is complete, the teeth will be covered in a fluoride varnish which needs to stay in place for at-least one hour. The fluoride becomes absorbed by the enamel and forms a super-dense surface layer called fluorapatite, which is actually harder and more resistant to decay than the traditional surface of enamel which is naturally made of hydroxyapatite. You will be prescribed a higher concentration fluoride tooth-paste after a slenderisation procedure such as Duraphat 2800 or Duraphat 5000.

Whereas you may experience some initial sensitivity as a result of the procedure, various studies have been completed which confirm that the slenderisation procedure does not make the teeth more prone to decay or gum disease.

What tools do we use?

Slenderisation is applied with a thin metal strip, a rotating diamond disk or a 'Komet' reciprocating thin blade or a very fine dental drill. An excellent video is available on you-tube to demonstrate the technique we use:

https://www.youtube.com/watch?v=SsKxz4vMJFw

I confirm that I have read and understood the information contained within this guide, and I have had the opportunity to ask questions. I feel that I understand the risks, benefits and limitations of the procedures described, and I understand that no promises or guarantees of the proposed outcome can be made. By signing this form I am providing my explicit consent to render necessary treatment to assist my dental condition.

Name of Patient _____

Date of Birth _____

Patient signature _____Dated _____

Parent/Guardian/
Legal Representative _____Dated_____