



## **WHAT HAPPENS TO THE TEETH AFTER THE BRACES ARE REMOVED**

When patients come to see us, unhappy about their smiles due to issues with tooth alignment, we explain that this is due to genetics. Every person gets something from mom's gene pool and something from dad's gene pool. Quite often, this results in either too much space or not enough space for the teeth to align. Genetics also result in the jaws not aligning properly. Whatever the reason, these discrepancies bring the patient to the orthodontist to help make things right. So, if we fix the problem, will the teeth now stay there forever? This is the most often asked question in an orthodontic office.

The answer is **NO**. After the orthodontist has completed treatment by aligning the bite and the teeth, we now have to worry about the teeth or the bite moving back in the direction that these teeth once occupied. We can alter the alignment of the teeth, but not the genetics that caused the misalignment. **Nothing is permanent in orthodontics.** We can align the teeth and the bite, but we cannot change the patient's genetic makeup or their muscle patterns. The muscles are the primary influence on tooth alignment. Remember, we can move the teeth with braces because the teeth can move on their own.

There are two types of tooth movement that can take place after the braces are removed. The first one is called **orthodontic relapse**, which is when the tooth starts to move back towards the original position after the braces are removed. This is what the patient sees if they do not wear their retainers as prescribed by their orthodontist. The other type of tooth movement is **natural physiologic drift**, which is what happens to all of us as we get older. This is what brings most of my adult patients to my office. Natural physiologic drift has to do with the width of our smiles getting narrower as we get older, causing teeth to crowd. Though we once blamed this on the wisdom teeth trying to erupt, as it turns out, there was no truth to this belief.

Relapse occurs because the teeth have memory and have a tendency to want to move back to their original position. This is why we have our patients wear retainers, to help stabilize the teeth after the braces are removed. Relapse potential is strongest immediately after the braces are removed, but continues for years afterwards. We are not completely sure where the line between relapse potential ends and natural physiologic drift begins, but it is somewhere around 3-5 years after the braces are removed. But, it really does not matter, so long as you understand that wearing retainers after braces are removed is a lifetime commitment. If you stop wearing them, your teeth will eventually begin to shift. How much the teeth shift is different for everyone.

So, once braces are removed, I will make an assessment and recommend the type of retention necessary to help hold the teeth in place. For the bottom teeth, this might be a permanent retainer that is glued to the back of the teeth. Since the lower front teeth have the highest relapse potential, this is quite often the retainer of choice. In the upper jaw, it might be a clear retainer or a more traditional removable wire retainer. Sometimes it is a combination of retainers. It really depends on the situation, so comparing one patient's retainers to another patient's retainers is like comparing apples to oranges. Each patient is taken on a case by case basis. I might go with a retainer in the top arch that is not my first choice, but one that I know the patient will wear. Nothing is set in stone, so all options are open for discussion.

The regimen might differ from office to office, but at our office, we have the following regimen. Retainers are worn full-time for a period of 2 months, which means the retainers are only removed for eating, brushing, contact sports, and band. Following the first two months, the patient is then asked to wear the retainer(s) twelve hours a day which is sleeping plus some evening wear. After one year, the patient can then start wearing the retainer(s) to bed only. If this regimen is not followed, the patient increases the risk of instability. The teeth are not going to shift if a day or two is missed. The archform is not going to collapse because the patient forgot to wear their retainer one night. The wisdom teeth cannot be used as an excuse either. These are the most common excuses. What happens more often is that the patient stopped wearing their retainers and notices that the teeth have started to shift. They then attempt to wear the retainer, which no longer fits, or breaks from forcing it into place.

So, remember that retainers are designed to hold teeth in place and teeth should not shift if the retainer is being worn as prescribed. What we really want our patients and parents to understand is that this is **a lifetime commitment**. Protect that great smile, wear your retainers.