

Rapid Palatal Expansion Consent/Instructions

When the upper arch is narrow, or constricted, the upper teeth do not have sufficient arch space to come in straight, and the back teeth end up in a crossbite position. The reason for this narrowed upper arch is due to both genetic and environmental growth factors. The upper arch can be corrected without surgery before puberty with the help of a **Rapid Palatal Expansion (HYRAX)** device. This device will widen the upper arch so that there will be additional space for better alignment of the upper teeth, and will relieve the crossbite over the back teeth. This is because the upper arch is still not one solid bone, but two separate bones, with loose tissue in between, like a river between two river banks. Now eventually this river fills in, or in the mouth this suture line fills in with bone, and the two bones become one. The **HYRAX** widens that loose tissue, thereby widening the upper arch, in 21 days and is then held in position for 3 to 6 months. This holds the space long enough for it to start filling in with new bone. As the arch widens a gap usually develops between the front teeth. The gap closes on its own with time.

The **HYRAX** device will be cemented into position, so that it cannot be removed unless by the dentist. This ensures good compliance and a more predictable and efficient result. There will be a screw in the middle of the appliance which will need to be turned twice a day, once in the morning, and once at night. Each turn of the appliance results in a $\frac{1}{4}$ rotation of the screw. Each full turn represents placing the key into the hole at the base of the arrow, and turning it fully towards the forward direction of the arrow until the key stops it from moving any further. Once again, this is to be done twice a day, once in the morning and once at night. This is to be done for a total of 21 days. At that time it will be determined if any additional opening is still required for larger discrepancies. Once the desired widening has been reached, the appliance remains for 3 – 6 months, and then is removed by the dentist.

It is very important that the teeth are kept very clean during this procedure. The appliance will act as a food trap, and improper cleaning will result in cavities. It is recommended to brush all teeth and gums after each meal, ensuring that there is not food trapped between the appliance and the teeth. Flossing is also required once a day.

Please avoid sticky foods. Please avoid placing too much pressure on the appliance. Do not use the appliance as a tool to crush or bite things with. With proper care and a little common sense, there will be great success with the HYRAX appliance.

I understand the above information, and I have had any questions answered to my satisfaction by Dr. Giuliani.

I hereby consent for the **HYRAX** to be used on _____,
who is my _____.

Parent/Guardian Signature

Printed Name

Date: _____