Greetings!

October is National Ergonomics Month! In celebration, I am focusing on one of the most popular equipment trends in the industry: saddle stools. These are becoming increasingly popular in dentistry—and for good reason! The benefits of the saddle are numerous, and riders worldwide are touting the positive impact on their musculoskeletal system. This newsletter is for everyone: from those who have never seen a saddle stool, to the long-term user who utilizes it 8 hours/day in the operatory. While they may appear quite simple to adjust, saddle stool owners often make two critical adjustment mistakes that can lead to worsening of musculoskeletal symptoms and spinal problems. I hope you enjoy the Ergo-News and find it helpful...Happy Trails!

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Saddle Stools
Selection and Adjustment Guidelines

For those unfamiliar with saddle stools, they may seem unconventional—if not radical—compared to traditional flat operator stools. However, with the prevalence of back pain in dentistry unwavering over the past 50 years (around 65%), alternative methods for sitting are gaining increased recognition.

The benefits of saddle stools in dentistry are numerous and include:

- The stool places you in a 'tripod' position, which is the most stable position for the hip joint.
- Diaphragmatic breathing is improved.
- Easier to get close to & move around the patient.
- Facilitates correct movement at the hips.
- Minimizes the need for backrest support.
- Neutral spinal posture promotes correct head posture and proper shoulder movement.
- Enables easier access in the 12:00 position.
- Easier to move correctly from the sit-to-stand position.
- Strengthens the trunk stabilizing muscles.

VIEW SADDLE STOOL VIDEO
SELECTION AND ADJUSTMENT
Two Common Saddle Stool Adjustment Errors

Just because a product is ergonomic does not mean it automatically benefits the user. The saddle stool is an excellent example of this. While it has very few adjustments (usually only 2), the way in which these are adjusted can either positively or negatively impact your spinal health.

1) **Saddle tilt (forward and backward).** For the average user with no spinal pathology, I recommend that the saddle stool be adjusted flat, which places the spinal in its most neutral position. However, for individuals with abnormal curvatures of the spine, the tilt should be modified accordingly. For individuals with flattening, or hypo-lordosis (left), of the lumbar spine the saddle should be tilted slightly forward. For those with excessive curvature, or hyper-lordosis (right) of the lumbar spine, the saddle should be tilted slightly backward to attain the most neutral spinal posture.

2) **Patient height.**

The most common mistake I see with the saddle is to position the patient at the same height as when the operator was using a traditional stool with flat seat. Since you sit higher in a saddle stool (halfway between standing and sitting), you will also need to usually position the patient higher to attain the correct forearm position (parallel to the floor or sloping slightly upward). Also, remember that it is an excellent opportunity for the assistant to stand for procedures when the dentist is in a saddle stool.

**Selection Guidelines.** A saddle stool with telescoping armrests is one of the most beneficial ergonomic interventions I have come across in the operatory. Equine-friendly or not, I feel every dentist and hygienist should at least trial a saddle stool with armrests in their operatory to see if they are comfortable with it. Keep in mind that the saddle stool utilizes different muscles than you generally use in a typical workday and you may become a little sore for the first few days. Use the stool only 3 hours or so for several days, then gradually increase your hours up to a full day of use.

Select a saddle stool that is the right contour for your pelvis. A
saddle that is too narrow for your pelvis can cause compression and be uncomfortable. Likewise, a saddle that is too wide for a smaller operator can cause uncomfortable splaying of the hips. Due to anatomical differences, men should consider either a highly padded style saddle or a split seat saddle stool to decrease compression on the genital area. A new style saddle stool also offers a flexible seat that moves with the operator, enabling movement of the lumbar spine.

Posturedontics, LLC was developed by a dental ergonomic consultant/physical therapist and clinical dentist to provide dental professionals with quality, research-based ergonomic education, products and resources. We value your input and ideas for future newsletters.

Please send us your ergonomic success stories!