

Correcting Pelvic Obliquity

by Kurt Juergens, DC

PELVIC OBLIQUITY REFERS TO A CONDITION characterized by misalignment of the pelvis, typically when one hip is higher than the other. This condition can lead to imbalances in posture and gait and cause a range of issues, including lower back pain, hip pain, and even affect the knees and feet.

Critical contributors to pelvic obliquity can include discrepancies in leg length, asymmetrical foot mechanics, and technical issues with the feet, such as foot pronation. It can affect the entire kinetic chain of the body. Inflexibility and strength deficits in the muscles supporting the hips, pelvis, and spine can also be contributing factors.

The kinetic chain concept describes how the body functions as an interconnected system, where movement and alignment in one part affect the entire structure. The feet serve as the foundation of this chain, playing a crucial role in maintaining overall body balance and posture. Any imbalance or misalignment in the feet can propagate upward, impacting the ankles, knees, hips, spine, and pelvis, potentially leading to conditions such as pelvic obliquity.

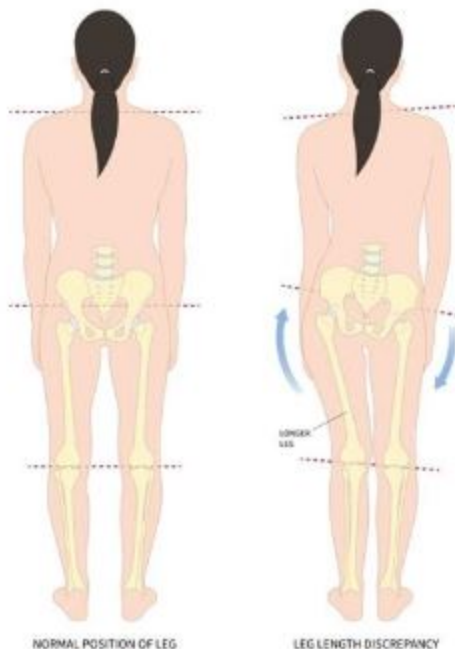
Custom, flexible foot orthotics can be a viable consideration and a potential solution for addressing pelvic obliquity. Custom orthotics are specially made shoe inserts designed to support and align the feet based on an individual's unique structure and biomechanics. Unlike over-the-counter insoles, custom orthotics are tailored specifically to an individual's foot shape and gait, offering precise correction of imbalances and misalignments.

Custom Foot Orthotics: Five Key Components

Precise Fit and Customization: Advanced technologies, such as 3D imaging, weight-bearing scans, and foam castings, are used to create custom orthotics, ensuring a perfect fit. This level of customization results in specific correction of issues such as pronation, supination, and discrepancies in leg length, all of which can contribute to pelvic obliquity. By addressing these root causes, custom orthotics help stabilize and balance the pelvis.

Three-Arch Support: The human foot has three arches — medial longitudinal, lateral longitudinal, and anterior transverse/metatarsal. Maintaining foot stability and function requires proper support for all three arches. Over-the-counter insoles typically support only one arch, leading to inadequate correction and potential worsening of foot mechanics. However, custom orthotics provide comprehensive support for all three arches, ensuring balanced weight distribution to minimize strain on the musculoskeletal system, namely the kinetic chain.

Enhanced Pelvic Stabilization: Custom orthotics contribute significantly to pelvic stabilization. By correcting foot alignment and providing balanced support, they help align the knees and hips, thus reducing the tilt and imbalance of the pelvis. Stabilization can alleviate symptoms associated with pelvic obliquity and prevent further deterioration. When left



uncorrected, imbalances can eventually lead to an acceleration of the degenerative process, resulting in conditions such as osteoarthritis.

Whole-Body Pain Relief: The benefits of custom orthotics extend beyond just the feet. Properly aligned feet can lead to improved posture, reduced stress on the knees and hips, and decreased lower back pain. Studies have shown that custom orthotics can significantly reduce lower back pain, thus highlighting their impact on overall musculoskeletal health.

Addressing Specific Conditions: Custom orthotics can be particularly beneficial for individuals with specific conditions that contribute to pelvic obliquity. For instance, they can help manage leg length inequality by providing appropriate elevation and support, thereby leveling the pelvis. Additionally, conditions such as plantar fasciitis, Achilles tendonitis, and foot pronation can be effectively addressed and managed through a tailored and custom orthotic solution so they do not exacerbate pelvic misalignment.

The importance of a tailored approach to custom orthotics cannot be overemphasized. The advanced scanning technology available today ensures a precise fit and effectiveness. Effective custom orthotics provide comprehensive support and significantly reduce the impact on the structures of the kinetic chain — from the feet up through the pelvis and spine. This holistic approach ensures symptomatic relief and correction of underlying biomechanical issues.

Exercise can be another important tool to manage and correct pelvic obliquity by strengthening and balancing the muscles around the pelvis. Here are some effective exercises:

1. Pelvic Tilts

Pelvic tilts help strengthen the lower back and abdominal muscles that support the pelvis. To perform pelvic tilts:

- Lie on your back with your knees bent and feet flat on the floor.
- Flatten your lower back against the floor by tightening your abdominal muscles and tilting your pelvis up slightly.

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- Hold this position for a few seconds, then relax. Repeat 10 to 15 times, concentrating on controlled movements.

2. Hip Flexor Stretch

Tight hip flexors often contribute to pelvic tilt. Stretching these muscles can alleviate some of the tension and help rebalance the pelvis. To perform hip flexor stretches:

- Kneel on one knee with the other foot in front, creating a 90-degree angle with both legs.
- Push your hips forward slightly while keeping your back straight to feel a stretch in the hip flexor of the kneeling leg.
- Hold for 20 to 30 seconds, then switch legs.
- Repeat three times on each side.

3. Glute Bridges

Strengthening the gluteal muscles can stabilize the pelvis and reduce obliquity. To perform a glute bridge:

- Lie on your back with your knees bent and feet flat on the floor.
- Lift your hips toward the ceiling, squeezing your glutes as you do so, until your body forms a straight line from shoulders to knees.
- Hold for a few seconds, then lower your hips back to the starting position.
- Repeat 10 to 15 times for two to three sets.

4. Side-Lying Leg Lifts

This exercise targets the muscles on the sides of your hips, which are crucial for pelvic stability. To perform a side-lying leg lift:

- Lie on one side with your legs straight and stacked on top of each other.
- Lift the top leg up slowly, keeping it straight, then lower it back down without letting it touch the bottom leg.
- Perform 10 to 15 repetitions, then switch sides. Repeat for two to three sets on each side.

5. Cat-Cow Stretch

This stretch improves flexibility in the lower back and helps align the spine and pelvis. To perform a cat-cow stretch:

- Start on your hands and knees in a tabletop position.
- Inhale and arch your back, dropping your belly toward the floor and lifting your head and tailbone upward (cow position).
- Exhale and round your spine toward the ceiling, tucking your chin to your chest and your tailbone under (cat position).
- Continue alternating between these positions for one to two minutes.

Regularly performing these exercises can help:

Improve Posture: By strengthening the muscles that support the pelvis, these exercises promote better alignment and posture.

Reduce Pain: Strengthening and stretching the muscles around the pelvis can alleviate pain associated with pelvic obliquity.

Enhance Mobility: Increased flexibility and strength can lead to better movement patterns and reduce compensatory movements that exacerbate the condition.

Prevent Further Injury: A balanced and stable pelvis can prevent additional musculoskeletal issues from developing.

Conclusion

Pelvic obliquity can significantly affect one's quality of life, leading to pain and functional impairments. Our bodies are dynamic and mobile machines; we are designed to move. Proper body alignment, postural symmetry, flexibility, and strengthening exercises all contribute to the body's ability to move efficiently and effectively.

Custom orthotics address the root causes of pelvic obliquity-related issues, such as foot mechanics and alignment. Through precise customization, comprehensive arch support, and enhanced pelvic stabilization, custom orthotics help correct pelvic obliquity and provide whole-body pain relief. Incorporating the previously mentioned exercises into your routine can significantly aid in managing and correcting this condition. Addressing postural and alignment deficits and incorporating specific exercises will lead to a healthier, more active life.

For those experiencing symptoms of pelvic obliquity or related musculoskeletal issues, consulting with a healthcare professional to explore the potential benefits of custom orthotics and specific exercises can be a valuable step toward improved health and well-being.



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