

KNEE OA: A CASE STUDY

A 55 year old overweight male wants to go on a holiday with his wife in 5 weeks and be able to walk around pain free.

Medical History

- Knee injury in 1986 resulted in a left knee partial medial meniscectomy
- Activities: Enjoys golfing and going for evening walks with his wife
- Pain: On the worst days, his pain is 8/10
 - Has stopped golfing completely
 - Experiences pain when going up and down stairs, getting in and out of the car, going from a seated to a standing position, and at night.
- Currently self-treating with ice and NSAIDs
- Imaging: (L) Knee medial joint space narrowing
(R) 1st MTP OA

Gait Analysis

- Bilateral genu varum, with excessive varus thrust at left knee during gait (*fig. 1*)
- Overpronated foot mechanics during gait (*fig. 2*)
- Hallux limitus on right foot; pain and swelling at 1st MTP joint



Fig. 1
KneeOA X-Ray



Fig. 2
Overpronation

Treatment Plan

- Custom unloading knee brace (fig. 3)
- Over the counter insoles with lateral wedge (fig. 4A)
- Rocker-sole shoes for daily use
- Supportive slippers for home use
- Enrollment in water fitness program at local community pool for weight loss
- Referral to physiotherapy for strengthening exercises



Fig. 3
Custom Knee Brace

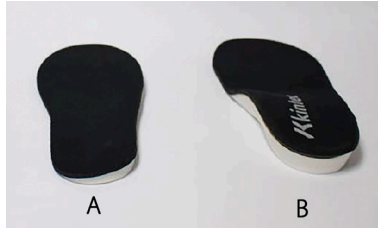


Fig. 4
Lateral Wedge

4-Week Follow Up

- Worst pain has been reduced from an 8 to a 5/10
- Booked in for a Kintec assessment for custom orthotics with a lateral wedge
- Built-in - one pair for walking shoes, one pair for golf shoes (fig. 4B)
- Enjoying Aquafit; has lost 5 lbs
- Can go for walks in the evening with his wife again

8-Week Follow Up

- Custom orthotics and brace were used consistently on holiday
- Was able to comfortably walk for 5-6 hours
- Worst knee pain has reduced to a 3/10
- Went to the driving range last week for the first time in over a year - he said, "Hit terribly but without a pain!"
- Can go for walks in the evening with his wife again

All of our Knee OA cases start from the ground up with our *Reactivate Knee OA Conservative Care Program*. We educate patients about their conditions and offer them a comprehensive solution that can include proper footwear, custom orthotics, and bracing. This multi-faceted approach gives patients access to a more complete solution, designed to work as a whole rather than in separate units.



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