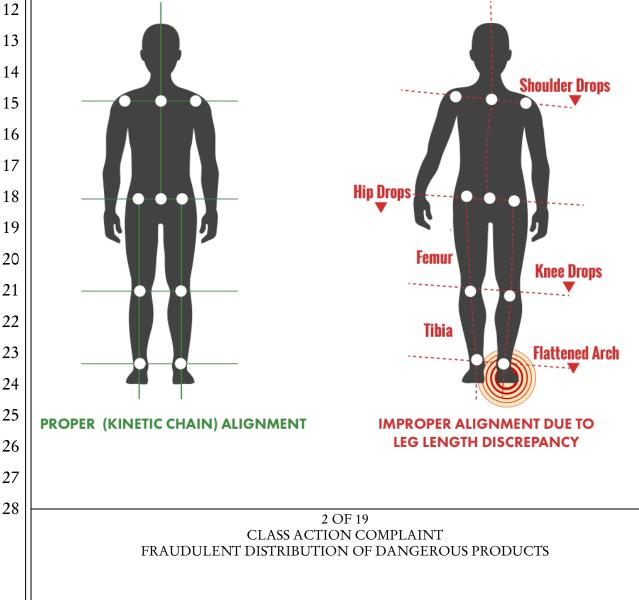
	Case 3:18-cv-02393-BTM-KSC Document 1 Filed 10/18/18 PageID.1 Page 1 of 19						
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Scott Sanborn - CA Bar #309935 The Law Office of Scott Sanborn 707 10 <sup>th</sup> Ave #609 San Diego, CA 92101 Phone: (619)808-5912 Email: <u>ss@scottsanborn.law</u> www.scottsanborn.law Attorney for Plaintiffs UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF CALIFORNIA DANIEL DREIFORT, individually, and on behalf of all others similarly situated, Plaintiffs, vs. DJO Global, Inc.; DJO, LLC; and DOES 1-20, Defendants. Souther and the states of the states						
<ol> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> <li>26</li> <li>27</li> <li>28</li> </ol>	<ol> <li>Plaintiff Daniel Dreifort, individually and on behalf of all others similarly situated (herein "Class"), brings this consumer protection class action against Defendants DJO Global, Inc. and DJO, LLC (collectively herein "DJO"), for their fraudulent distribution of dangerous products. DJO should warn consumers of the danger, sell its thick sole walking boot together with the Evenup as a complete package, reimburse defrauded customers (cost to repair), 1 OF 19</li> </ol>						
	CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS						

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and create a conspicuous webpage to process past personal injury claims in good faith. Plaintiffs allege the following on information and belief.

### Introduction

- 2. DJO manufactures and distributes a thick sole walking boot (herein "boot") both directly to consumers and also indirectly through prescribing medical intermediaries. The thick sole is approximately 1-2 inches thick resulting in one leg being longer than the other, aka leg length discrepancy. Walking in the boot causes knee, hip, and back pain. In at least one case, the boot has caused permanent injury resulting in a hip replacement operation.
- 3. Consumers don't know the boot causes harm. DJO does not warn consumers or otherwise communicate the potential for pain or injury.



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### **PARTIES**

- Plaintiff Representative Daniel Dreifort is a citizen of California and resides in San Diego County.
- 5. Defendant DJO Global, Inc. is a incorporated in Delaware and with its primary place of business in San Diego County, California.
- Defendant DJO, LLC is a Delaware limited liability company registered to do business in California. DJO, LLC's member is DJO Global, Inc., a citizen of both Delaware and California.
- 7. DJO Global, Inc. and DJO, LLC are referenced together as "DJO" because there's no distinction for liability purposes. They are each individually liable for every allegation herein. DJO Global, Inc. is a holding company. DJO, LLC purports to be owned by DJO Global, Inc. DJO, LLC purports to be a manufacturer and distributer of orthopedic rehabilitation products, which includes the thick sole walking boots. DJO Global, Inc. also, purports to manufacture and distribute the same. Both companies are located at the same address with the same employees. The DJO website uses the name DJO Global, Inc. and DJO, LLC interchangeably at least once. The website, www.djoglobal.com, purports to be wholly owned by DJO Global, Inc. However, at the bottom right hand corner of each page, "DJO, LLC" is written in large bold letters suggesting it is the owner. Many of the product instructions are labeled, "DJO GLOBAL" then followed on the next line with, "DJO, LLC" and then followed again on the next line, "A DJO Global Company." DJO, LLC is the alter ego of DJO Global, Inc. Additionally, fraud, which is alleged in this complaint, is capable of piercing either company's veil pursuant to Delaware laws.
- 8. This Complaint shall be interpreted as alleging each Defendant company is liable, jointly and severally, for all allegations.

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### JURISDICTION & VENUE

- 9. This court has Subject Matter Jurisdiction pursuant to the Class Action Fairness Act. The amount in controversy is likely in excess of \$5 million. The number of Class members is likely in excess of 100. There is minimum diversity because at least one of the class members is a citizen of another state.
- 10. Personal jurisdiction is established because all named parties reside in California.

11. Venue is proper because all named parties reside in San Diego County.

12. All allegations occurred within the applicable statute of limitations.

### FACTUAL BACKGROUND

- 13. Plaintiff Daniel Dreifort sought medical treatment for an ankle injury. He was prescribed an Aircast boot, manufactured by DJO. No one told Mr. Dreifort of the risk for a secondary injury as a result boot use. Nor did anyone tell him about the Evenup shoe leveler.
- 14. After wearing the boot six days, Mr. Dreifort herniated a disk in his back. (Note: Mr. Dreifort had previous disk problem in 2007 and again in 2013) The boot put him out of commission, in pain for two weeks.
- 15. Mr. Dreifort subsequently purchased the Evenup. Mr. Dreifort believes the Evenup would have prevented the back injury, or at least lessened or delayed it. The Evenup is a product designed to equalize a patient's healthy limb length and reduce body strain while walking in a cast or walker.
- 16. Mr. Dreifort's story is typical among the users of DJO manufactured thick sole boots. See Exhibit C, Evenup Consumer Reviews. The typical user seeks treatment for a lower limb injury and is prescribed DJO boot. Because the doctor is not warned by DJO, the doctor consequently prescribes the boot to the patient without a warning. The patient uses the boot and experiences pain in their knees, hips, and back. The patient is not aware that the pain was caused by

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an unsafe product. Nor are they aware it could feasibly be relieved with the use of an Evenup had they known.

17. In other cases, DJO distributes the boot directly to the consumer, without a doctor, through their website, <u>www.betterbraces.com</u>. Boots are also readily available to the consumer through 2-day delivery from <u>www.amazon.com</u>.



### **CLASS ALLEGATIONS**

18. Plaintiff Daniel Dreifort represents the following Class and sub-classes.

19. The Class, as used herein, shall include any person in the United States who received a DJO boot.

20. The "Class" as used, references all three sub-classes. The sub-classes are distinguished by the various statutes of limitations. The sub-classes are necessary in order to represent the interests of all potential members who may otherwise be excluded by the statute of limitations if only one class was defined.

a. <u>Sub-Class A</u>: is all members within two-year statute of limitations.

b. <u>Sub-Class B</u>: is all members within three-year statute of limitations.

c. <u>Sub-Class C</u>: is all members within four-year statute of limitations.

21. Note that a person may be a member of multiple sub-classes. For instance, Class Representative Mr. Dreifort is a member of all three sub-classes because his injuries fall within the two-year statute of limitations which inherently falls

> 5 OF 19 CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

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within the three- and four-year statute of limitations. As such, Sub-Class C would be the largest sub-class, followed by Sub-Class B and then Sub-Class A. 22. <u>Ascertainability</u>- The Class will be ascertained through the records of distribution DJO is required to maintain for its walking boots. Alternatively, the Class will be ascertained through DJO's customer billing records and financial reports. Contingently, it will be ascertained through Plaintiff's advertisements. The method of last resort is to simply enjoin the unlawful conduct and require DJO to create a website to process claims just as we have initially requested in the demand letters.

23. <u>Numerous</u>- As previously plead establishing CAFA jurisdiction, the Class is likely in excess of 100 persons. Based on DJO's claims of being a leading distributor of boots and the number of consumer complaints, it is almost certain that more than 100 persons have received a DJO boot in the United States. If Plaintiff had any doubt less the Class As such, the Class is so numerous that joinder is impractical.

- 24. <u>Commonality</u>- The questions of law and fact are common to all the people given a DJO boot in the United States. All people given a DJO boot suffer the same injury by receiving an incomplete, asymmetrical, dangerous product. The answers to the following questions will resolve the matter central to the issue for all members of the Class in a single stroke.
  - a. Whether DJO thick sole boots are dangerous.
  - b. Whether DJO made false representations.
  - c. Whether DJO made misleading or incomplete representations to consumers.
  - d. Whether DJO had a duty to disclose product dangers to consumers.
  - e. Whether DJO had knowledge of the product dangers.
  - f. Whether DJO intended to induce reliance.

### 6 OF 19

### CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

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	Case 3:18-cv-02393-BTM-KSC Document 1 Filed 10/18/18 PageID.7 Page 7 of 19					
1	g. Whether DJO makes money when consumers suffer secondary injury.					
2	h. Whether DJO makes money from Evenup sales.					
3	i. Whether DJO makes money when consumers have knee or hip					
4	replacements.					
5	j. Whether DJO warned doctors.					
6	k. Whether DJO marketed and sold directly to the consumers.					
7	l. Whether DJO is liable for declaratory relief purposes.					
8	m. Whether declaratory relief is adequately sufficient to preserve the claim					
9	of members with more severe personal injuries.					
10	n. Whether the UCL, FAL, and CLRA are non-exclusive remedies that					
11	will not prejudice common law remedies for atypical members who					
12	suffered more severe bodily injury.					
13	25. <u>Typicality</u> - Mr. Dreifort received a DJO boot in the United States in 2018. Mr.					
14	Dreifort suffered back injury because no one warned him the boot was					
15	dangerous. Mr. Dreifort has standing for each of the causes of action and has					
16	standing for each sub-class. His injury is typical of the class. To the extent his					
17	injury is not typical, he seeks declaratory relief on behalf of the atypical					
18	members of the class.					
19	26. <u>Adequacy</u> - Mr. Dreifort is an adequate representative because he lives in San					
20	Diego County where he is geographically positioned to maintain this class					
21	action. Mr. Dreifort acknowledges his fiduciary duty to the class and is ready to					
22	make decisions on their behalf. His motive is to correct the unlawful conduct of					
23	Defendants and preserve the interests of past, present, and future DJO boot					
24	users.					
25	27. Predominance & Superiority- The questions of law and fact that are common					
26	to the Class predominate over individual questions of law and fact. To the extent					
27	there may be any individual questions of fact, this class action addresses the					
28	7 OF 19					
	CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS					

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question of law by making it common to all in the form of declaratory relief. This has the function of providing a superior method of resolving the infrequent individual questions of fact. Individualized litigation would create a risk of inconsistent and/or contradictory judgements arising from the same set of facts. Individualized litigation would also increase the delay and expense to all parties and court system and the issues raised by this action. The damages or other financial detriment suffered by individual Class members may be relatively small compared to the burden and expense that would be entailed by individual litigation of the claims against the Defendant. The injury suffered by each individual member of the proposed class is relatively small in comparison to the burden and expense of individual prosecution of the complex and extensive litigation necessitated by Defendant's conduct. It would be virtually impossible for members of the proposed Class to individually redress effectively the wrongs to them. Even if the members of the proposed Class could afford such litigation, the court system could not. Individualized litigation increases the delay and expense to all parties, and to the court system, presented by the complex legal and factual issues of the case. Individualized litigation would force patients to make public otherwise confidential medical information thereby discouraging redress. By contrast, the class action device presents far fewer management difficulties, and provides the benefits of single adjudication, economy of scale, and comprehensive supervision by a single court.

28. Unless the Class is certified, Defendant will retain monies received as a result of Defendant's unlawful and deceptive conduct alleged herein. Unless a class- wide injunction is issued, Defendant will also likely continue to engage in unlawful and misleading business practices, and members of the Class will continue to be misled, harmed, and denied their rights under California law.

29. Further, Defendant has acted or refused to act on grounds that are generally applicable to the class so that declaratory and injunctive relief is appropriate to the Class as a whole, making class certification appropriate pursuant to Fed. R. Civ. P. 23(b)(2).

### FIRST CAUSE OF ACTION

### FRAUD

### Sub-Class B Plaintiffs (3 yr SOL) against all Defendants

30. Plaintiff repeats, re-alleges, and incorporates by reference the above allegations as if fully stated herein.

31. DJO falsely represented that their boots enable a normal gait.

Together in Motion.

## AIRCAST WALKING BRACE : Positioning and Value Proposition

## Positioning Statement

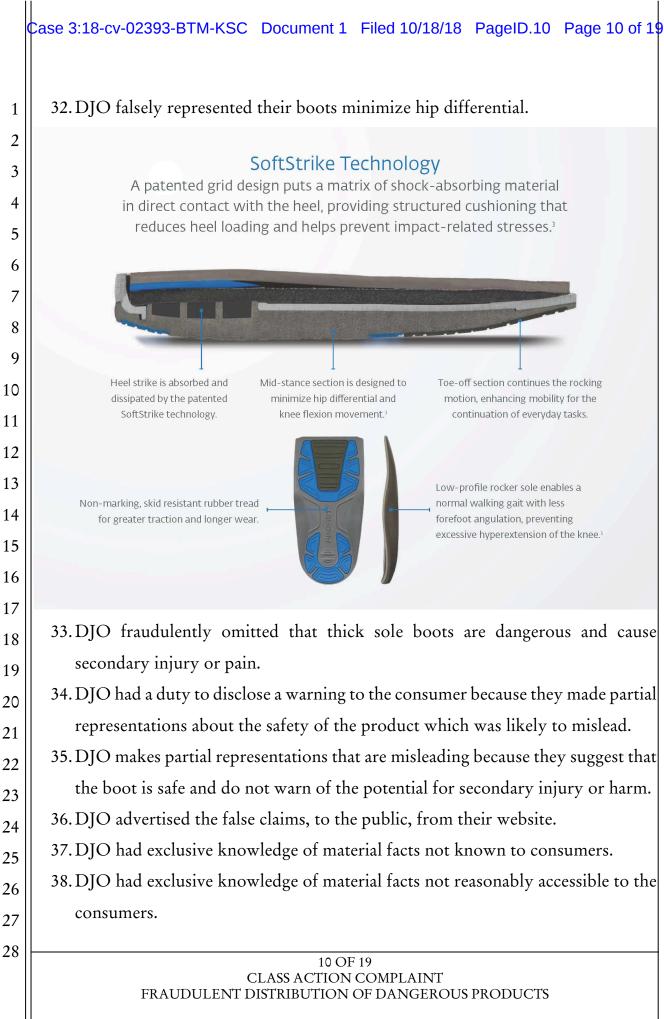
Smart Healing With Every Step

## Value Proposition

 The clinically proven Aircast Walking Braces have continuously advanced the science of pneumatic healing for over 30 years. The uniquely layered aircells can be individually custom-inflated, while the multi-radius rocker sole and anatomical design promotes superior offloading for a more normal gait, allowing smart healing with every step.

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The Law Office of Scott Sanborn www.scottsanborn.law 39. DJO has exclusive knowledge that their thick sole boot caused body strain.

40. DJO marketed and sold a product exclusively intended to remedy the defect caused by their walking boots.



- 41. DJO actively concealed the potential for harm publishing "CONTRAINDICATIONS: NA" in the manufacturer's instructions on some boot models.
- 42. DJO actively concealed that their boots cause injury by advertising the boots are clinically proven to provide pain relief and improve healing time.
- 43. "DJO Global is a leading provider of high quality walking braces. The Aircast family of premium walking braces are clinically proven to reduce swelling, improve pain relief, and improve healing time." DJO promo video, from their website, referencing all Aircast walking boot models.
- 44. "... and a rocker sole promotes a natural walking style for smart healing at every step." DJO promo video, from their website, referencing all Aircast walking boot models.

45. The defect is central to the product's function. The thick sole causes secondary pain and injury. It does not improve pain relief for the secondary injury. It does not improve healing time for the secondary injury. It does not minimize hip differential, it causes hip differential. It does not enable a normal gait. I causes an abnormal gait. It's not smart healing with every step.

#### 11 OF 19 CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

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- 46. DJO's representations and failure to disclose are regarding product safety and are material in that a consumer would likely take different actions in order to avoid additional pain and injury.
- 47. DJO does not disclose the potential for harm to physicians or other healthcare professionals.
- 48. Plaintiff Daniel Dreifort, along with the Class were not aware of the risk for injury by using the boot.
- 49. DJO intended to induce Mr. Dreifort and other class members as evidenced by their additional profits. DJO is incentive to conceal the product dangers because DJO gets more money when patients hurt themselves. DJO profits from and sells other products intended to address injuries caused by their thick sole walking boots. DJO sells the Evenup product separately, intended to "equalize a patient's healthy limb length and reduce body strain while walking in a cast or walker..."

50. DJO also profits from and sells knee and hip implants for the patients who suffer permanent knee and hip injury.



51. Physicians, patients, and consumers would take efforts to prevent the harm caused by the boot if they were warned of the potential harm.

#### 12 OF 19 CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

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- 52. Mr. Dreifort, either would not have worn the boot or he would have purchased an Evenup product earlier.
- 53. Mr. Dreifort suffered injury by the way of pain and herniated disk in his back. He also spent additional money to purchase an Evenup product.
- 54. Mr. Dreifort and the entire Class all suffered harm by acquiring a dangerous product that caused a secondary injuries, injuries central to the product's function.
- 55. With regards to this Fraud Cause of Action, Mr. Dreifort seeks declaratory relief in order to establish liability, against DJO, on behalf of himself and the Class. Declaratory relief is sought in order to ensure that Class members are not prejudiced by this action so they may seek damages individually.

### SECOND CAUSE OF ACTION

### FALSE ADVERTISING LAW (Bus. & Prof. Code § 17500 et seq.)

### Sub-Class B Plaintiffs (3 yr SOL) against all Defendants

56. Plaintiff repeats, re-alleges, and incorporates by reference the above allegations as if fully stated herein.

57. DJO made untrue and misleading representations, about the boot safety quality, to the public through their website, product catalog, product instructions, advertisement videos, and other means.

58. DJO failed to make complete truthful representations which would indicate the product should be used in conjunction with a separate product, Evenup.

59. DJO knew or should have known its false representations were indeed untrue.

60. DJO intended to induce members of the public to believe that the product is safe and complete in its current state.

61. DJO failed to produce the type of product they advertised when they failed to include an Evenup and when they failed to diclose the dangers to the consumer.62. Mr. Dreifort and the Class suffered harm as a result of DJO's false advertising.

### 13 OF 19

### CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

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	Case 3:18-cv-02393-BTM-KSC Document 1 Filed 10/18/18 PageID.14 Page 14 of 19									
1	THIRD CAUSE OF ACTION									
1 2	<u>THIRD CAUSE OF ACTION</u> <u>UNFAIR COMPETITION LAW (Bus. &amp; Prof. Code § 17200 et seq.)</u>									
2	Sub-Class C Plaintiffs (4 yr SOL) against all Defendants									
4	63. Plaintiff repeats, re-alleges, and incorporates by reference the above allegations									
5	as if fully stated herein.									
6	64. DJO engaged in unlawful business acts and practices.									
7	65. DJO engaged in unfair business acts and practices.									
8	66. DJO engaged in fraudulent business acts and practices.									
9	67. DJO engaged in unfair, deceptive, untrue, and misleading advertising.									
10	68. DJO engaged in activity prohibited by the FAL.									
11	69. Mr. Dreifort and the Class suffered harm because of DJO's unfair business acts.									
12	FOURTH CAUSE OF ACTION									
13	CONSUMER LEGAL REMEDIES ACT (Civ. Code § 1750 et seq.)									
14	<u>Sub-Class B Plaintiffs (3 yr SOL) against all Defendants</u>									
15	70. Plaintiff repeats, re-alleges, and incorporates by reference the above allegations									
16	as if fully stated herein.									
17	71. Plaintiff's counsel sent DJO Global, Inc. and DJO, LLC each the requisite									
18	Notice and Demand to correct their unlawful conduct and remedy their wrongs.									
19	Plaintiff's counsel completed the requisite pursuant to CLRA requirements.									
20	72. The Notice notified DJO that their products are unlawful pursuant to Civ.									
21	Code Sec 1770 subdivision (a) paragraphs (5),(7), and (9).									
22	73.DJO represented that goods have characteristics, uses, benefits, or qualities									
23	which they do not have.									
24	74. DJO represented that goods are of a particular standard, quality, or grade when									
25	they are of another.									
26	75. DJO advertised goods with the intent not to sell them as advertised.									
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28	14 OF 19									
	CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS									

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- 76. DJO had knowledge of the false and misleading representations when they sought to profit by selling a product solely intended to fix a problem the created and they failed to disclose.
- 77. DJO profits when consumers suffer from knee, hip, and back injuries, because they are able to sell their other products such as surgical implants at an alarming rate.

78. DJO has an incentive not to advertise it's boots truthfully and lawfully.

79. Class members are inherently disabled pursuant to the CLRA as illustrated by their initial need for the boot. Additionally many Class members are also elderly.

80. Mr. Dreifort suffered injury as a result of DJO's unlawful representations.

### FIFTH CAUSE OF ACTION

### PRODUCT LIABILITY

### Sub-Class A Plaintiffs (2 yr SOL) against all Defendants

81. Plaintiff repeats, re-alleges, and incorporates by reference the above allegations as if fully stated herein.

82. Design- DJO manufactures, distributes, and markets a dangerous product. The thick sole boot is unreasonably dangerous because a viable safer alternative exists. DJO manufactures and distributes a boot with a thinner sole called the Aircast Airselect Elite. This product is superior and DJO advertises it as such. The Aircast Airselect Elite is still dangerous, just not as dangerous as the boots with the thicker sole. It is practical to manufacture and distribute the superior design as demonstrated by DJO's likewise behavior. The retail cost of the boot is slightly increased. However, it is not plausible that a thinner sole, with less rubber, actually costs more to manufacture.

83. As a result of its defective design, Mr. Dreifort suffered an injury.

15 OF 19 CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

84. Warning- The boot has a high utility in that it is effective in addressing the user's primary injury. Regarding its primary function, the boot gets high praises from users. DJO does not adequately warn consumers of the risk of injury. In fact, DJO does not warn consumers at all. Nor do they warn prescribing physicians.
85. As a result of the inadequate warning, Mr. Dreifort suffered an injury.

### **PRAYER FOR RELIEF:**

Plaintiffs seek non-exclusive remedies pursuant to the FAL, UCL, & CLRA. Additionally, Plaintiffs seek declaratory relief establishing liability pursuant to both common law causes of action, Fraud and Products Liability.

- <u>CLRA Actual Damages</u>- an amount to be determined, likely in excess of \$5 million. The amount will be measured as the cost to repair a defective product. Alternatively, it will be measured as value promised minus the value received. We will take the amount of DJO boots distributed (within the SOL), then multiply that number by approximately \$29.99 +taxes +shipping, the cost of an Evenup.
- 2. <u>CLRA Punitive Damages</u>- an amount to be determined based on all relevant factors including but not limited to fraud and the egregiousness of their behavior prioritizing profit over consumer safety.
- 3. <u>CLRA Disabled (Cal Civ Code § 1780(b))</u>- an amount to be determined once the Class is quantified. Plaintiffs seek \$5,000 for each disabled Class member who is found to have substantially suffered. All Class members are likely considered disabled and should be presumed as such given that they needed the boot to begin with. (Note: All CLRA remedies above are cumulative, nonexclusive, in addition to all other remedies.)

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4. FAL Restitution- an amount to be determined based on the size of the Class. The measure of restitution will be the difference in what was paid and what a reasonable consumer would pay, multiplied by the number of boots distributed. The difference in value per boot is \$29.99 +taxes +shipping because that is an amount to make the product complete as advertised to a reasonable consumer. (Note: All FAL remedies are cumulative, non-exclusive, in addition to other remedies.)

5. UCL Restitution- an amount to be determined based on the size of the Class. The measure of restitution will be the difference in what was paid and what a reasonable consumer would pay, multiplied by the number of boots distributed. The difference in value per boot is \$29.99 +taxes +shipping because that is an amount to make the product complete as advertised to a reasonable consumer. (Note: All UCL remedies are cumulative, non-exclusive, in addition to other remedies.)

- 6. Fraud Declaratory Relief- so members are not prejudiced from bringing their individual personal injury claims.
- 7. Products Liability Declaratory Relief- so individual members may choose between which common law claim best protects them .
- 8. Treble Damages Disabled (Civ. Code § 3345)- an amount to be determined based on the size of the Class.
- 9. Pre-judgement interest.
- 10. Attorney's fees.
- 11. Costs of this suit.
- 12. Injunction- an order enjoining Defendant's unlawful methods, acts, or practices.
- 13. <u>CLRA Discretionary</u>- for such other and further relief as this Court may deem fair, just, equitable, and proper.

### 17 OF 19

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	Case 3:18-cv-02393-BTM-KSC Document 1 Filed 10/18/18 PageID.18 Page 18 of 19
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	18 OF 19 CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

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### CIVIL CODE SECTION 1780(d) AFFIDAVIT

I, Scott Sanborn, attorney for Plaintiff Daniel Dreifort in the above titled action, am authorized to execute this affidavit on his behalf. This action is commenced in the county in which DJO Global, Inc., and DJO, LLC both reside as to their principal place of business. San Diego is also the county which Defendants are doing business and where a substantial portion of the events alleged in this action occurred. I declare under the penalty of perjury that the above is true and correct. Executed in October 18, 2018 in San Diego, California. 

> Scott Sanborn Attorney for Plaintiffs

/s/ Scott Sanborn

### 19 OF 19 CLASS ACTION COMPLAINT FRAUDULENT DISTRIBUTION OF DANGEROUS PRODUCTS

## JS 44 (Rev 08/16) Case 3:18-cv-02393-BTM-KSCIPPIC COVER SHEET PageID.20 Page 1 of 1

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. *(SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)* 

I. (a) PLAINTIFFS Dreifort, Daniel, individually, and on beha	lf of all others similarly	v situated.		<b>DEFENDANTS</b> DJO Global, Inc. DJO, LLC					
(b) County of Residence o (E)	f First Listed Plaintiff <u>S</u> CEPT IN U.S. PLAINTIFF CA	San Diego, CA		County of Residence NOTE: IN LAND CO THE TRACT	(IN U.S. PLA	Defendant INTIFF CASES O. I CASES, USE TH DLVED	· · · · · · · · · · · · · · · · · · ·		
(c) Attorneys (Firm Name, 2 Scott Sanborn; The Law San Diego, CA 92101; 6	Office of Scott Sanbor	<sup>r)</sup> n; 707 10th Ave #6	609,	Attomeys (If Known) Matthew Dart; Dar CA; 858-792-3616		6 High Bluff [ CV2393 B		300; Sa	n Diego,
II. BASIS OF JURISDI	CTION (Place an "X" in C	ne Box Only)		TIZENSHIP OF P	RINCIPAL	PARTIES			
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Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.21 Page 1 of 24

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# Exhibit A Plaintiff's CLRA Affidavit

### CIVIL CODE SECTION 1780(d) AFFIDAVIT

I, Daniel Dreifort, plaintiff in this action against DJO Global, Inc. and DJO, LLC, am executing this affidavit on behalf of myself and the putative class. This action is commenced in the county in which DJO Global, Inc., and DJO, LLC both reside as to their principal place of business. San Diego is also the county which Defendants are doing business and where a substantial portion of the events alleged in this action occurred. I declare under the penalty of perjury that the above is true and correct. Executed in October 17, 2018 in San Diego, California.

/s/ Daniel Dreifort

Daniel Dreifort Plaintiff Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.23 Page 3 of 24

# Exhibit B CLRA Demand Letter

Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.24 Page 4 of 24 The Law Office of

SCOTT SATIBORI DE OPPRESSO LIBER

August 4, 2018

**ATTN: Legal Department** DJO, LLC. 1430 Decision Street Vista, CA 92081

### Re: NOTICE & DEMAND (for DJO, LLC.)

To Whom It May Concern:

It has come to my attention that DJO, LLC. and DJO Global, Inc. may be distinct entities. As such, this letter is intended for the entity known as DJO, LLC. This letter is substantially the same as the previous letters I have sent to DJO Global, Inc. except that the demand amount has doubled to \$500,000. The accusations are the same because I am unable to determine any real distinction between the two entities. I simply changed the dates for the response deadline, and added "LLC." after each DJO reference. The demand expiration date for DJO Global, Inc. remains at August 10, 2018. An agreement to settle by either entity shall resolve the matter with both entities. With that said, an acceptance of first offer before August 10 will effectively render this demand as void. Said differently, you can avoid the \$500,000 demand if the \$250,000 offer is accepted before the August 10 expiration. These differences are taking into account the development of the lawsuit. Today I spoke with a young woman whose hip was replaced in January 2018 as a result of walking around in a boot.

Pursuant to California Civil Code section 1782, this letter shall serve as both NOTICE and DEMAND. More specifically, the letter will formally notify DJO, LLC. that some of its AirCast and ProCare products are unlawful pursuant to **Cal. Civ. Code § 1770** subdivision (a) paragraphs (5), (7), and (9). Several DJO, LLC. products are dangerous and fail to disclose the risk of bodily injury.

The demand portion of this letter is an opportunity of DJO, LLC. to correct or otherwise remedy its prior acts and omissions by providing (1) conspicuous warnings, (2) a webpage to process injury claims, and (3) \$500,000. This demand/ offer to resolve expires on September 7, 2018. I will ensure this letter and subsequent communications will remain confidential until and unless a lawsuit is filed.

Facts

707 10<sup>th</sup> Avenue Unit 609 San Diego, CA 92101 (619)808-5912 <u>ss@scottsanborn.law</u> www.ScottSanborn.law My dear aunt, Linda Sanborn, has reached out about her experience wearing the AirCast FP Walker.

[...] I injured a tendon in my foot and have been wearing a "boot" since Feb. 21. It has not healed, at least not completely (that's what happens when you get old!), and it looks as though I will be wearing the boot for a couple more months.

The boot was initially prescribed by **Theorem** [...], then fitted by a specialist, approved by a sports medicine orthopedist (they're calling it an athletic injury--as if I am the least bit athletic), and seen by my team of three physical therapists. Not one of them mentioned to me that wearing the boot could result in damage to my hips and knees. Because the boot has a thick "sole", it has the effect of making one leg longer than the other. That throws my gait off. Within just a few hours of wearing it I was experiencing pains in my back and in my hips and knees. So, I "googled" "what kind of shoe can I wear with this particular boot". Through my research I found a device called an "Even Up". I wear it over a tennis shoe, it adds height to the shoe and "evens up" my two legs. Gone are the pains.

I have since heard of many people who wore the boot and ended up having to have hip and/or knee replacements. [...] None of the experts who dealt with me warned me of the danger of the boot, or suggested a device such as the "Even Up". As a matter of fact, the physical therapists and the orthopedic doctor were fascinated to see my Even Up. They had never heard of it. It seems to me that the manufacturer of the boot should give notice to the injured patient that wearing the boot might result in damage to other joints. It would be interesting to learn how many patients wearing the boot end up damaging other joints. [...]

Legal Analysis

The law and analysis are reserved for future litigation. However, if DJO, LLC. has a sincere legal question, that will assist them in justifying an early settlement, and that question is specific; I will disclose my legal arguments to the extent warranted by the circumstances. Basically, I am motivated to resolve the matter unless I feel that my motivation is not reciprocated.

**NOTICE:** Pursuant to the California Consumer Legal Remedies Act ("CLRA"), this letter shall be interpreted as notifying DJO, LLC. that it has made material omissions of certain products. Those material omissions include failing to warn consumers and failing to warn learned intermediaries, of product dangers. The omissions are material and rise to the level of unlawful methods, acts, or practices because the omissions are pertinent to consumer safety and DJO, LLC. knew of the safety risk. The specific products include, but are not

limited to, the AirCast AirSelect, XP Diabetic Walker, FP Walker, ProCare MaxTrax, XcelTrax, MiniTrax and any other thick sole product. The thick sole of these products increase the length of one leg while the other remains at regular height consequently causing knee, hip, and back pain. In more severe cases, it has caused users to suffer permanent injury.

DJO, LLC. had a duty to disclose the risk of injury pursuant to the following paragraphs of Cal. Civ. Code § 1770 subdivision (a):

(5) Representing that goods or services have sponsorship, approval, characteristics, ingredients, uses, benefits, or quantities which they do not have or that a person has a sponsorship, approval, status, affiliation, or connection which he or she does not have.

(7) Representing that goods or services are of a particular standard, quality, or grade, or that goods are of a particular style or model, if they are of another.

(9) Advertising goods or services with intent not to sell them as advertised.

Knowledge, Conflict of Interest, and Disabled Persons DJO, LLC. has knowledge regarding the bodily injury caused by the thick sole products as demonstrated by its marketing of its EvenUp product.

It is noted that DJO, LLC. is a leading manufacturer and distributer of a broad range of knee and hip surgical reconstructive implant products which creates an appearance of impropriety.

It is further noted that people harmed by DJO, LLC. thick sole products are likely considered disabled pursuant to Cal. Civ. Code § 1780 subdivision (b) as indicated by their initial use of the product.

**DEMAND:** Pursuant to the CLRA, this letter shall also be interpreted as a demand. The demand may also be construed as an offer to settle this matter. The demand includes three parts:

- 1. <u>Product Safety Warnings</u>- Conspicuous warning labels on the product and safety training for all learned intermediaries.
- 2. <u>DJO, LLC. Webpage to Process Claims</u>- A website easily found via a DJO, LLC. product search, which unwarned consumers can make an injury claim, which DJO, LCC. will respond timely(two weeks) with a good faith offer considering both special and general damages, and informs consumers of all significant alternative legal rights.

ss@scottsanborn.law

CA Bar #309935 707 10<sup>th</sup> Ave #609 San Diego, CA 92101 (619)808-5912 ss@scottsanborn.law

3. <u>Money</u>- \$500,000. This is calculated as a pre-litigation number. Be advised once litigation begins, the amount sought in the complaint will likely far exceed this demand to better reflect the amount of harm.

### Conclusion

This offer *expires September 7, 2018*. Please respond by that date noting the position of DJO, LLC. and its intent to either accept the offer; oppose the offer; or propose its own correction. This letter is written and sent as an obligation pursuant to the CLRA. The CLRA is not an exclusive remedy and additional remedies will likely be sought if no resolution is reached by September 7. Certification pursuant to the CLRA class action rules will be sought in order to fairly and adequately represent the interests of the class.



Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.28 Page 8 of 24

# Exhibit C Leg Length Discrepancy Study showing Causation

#### Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.29 Page 9 of 24

Gait & Posture 59 (2018) 76-82



Contents lists available at ScienceDirect

### Gait & Posture



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Full length article

### 3D gait analysis with and without an orthopedic walking boot

#### H. Gulgin\*, K. Hall, A. Luzadre, E. Kayfish

Movement Science Department, Grand Valley State University, Allendale, MI, USA

#### ARTICLE INFO

Keywords: Gait Leg length discrepancy Orthopedic Boot

Asymmetry

ABSTRACT

*Introduction:* Orthopedic walking boots have been widely used in place of traditional fiberglass casts for a variety of orthopedic injuries and post-surgical interventions. These walking boots create a leg length discrepancy (LLD). LLD has been shown to alter the kinematics and kinetics of gait and are associated with lumbar and lower limb conditions such as: foot over pronation, low back pain, scoliosis, and osteoarthritis of the hip and knee joints. Past gait analyses research with orthopedic boots is limited to findings on the ipsilateral limb. Thus, the purpose of the study was to examine bilateral gait kinematics & kinetics with and without a walking boot. *Methods:* Forty healthy participants (m = 20, f = 20, age  $20.7 \pm 1.8$  yrs., ht.  $171.6 \pm 9.5$  cm, wt.

 $73.2 \pm 11.0 \text{ kg}$ , BMI 24.8  $\pm 3.2$ ) volunteered. An eight camera Vicon Motion Capture System with PIG model and two AMTI force plates were utilized to record the walking trial conditions: (1) bilateral tennis shoes (2) boot on right foot, tennis shoe on left foot (3) boot on right foot, barefoot on left foot. Data were processed in Nexus 2.2.3 and exported to Visual 3D for analysis.

*Results*: When wearing the boot, there were significant differences in most joint angles and moments, with larger effects on long limb.

*Conclusion:* The walking boot alters the gait in the same way as those with existing LLD, putting them at risk for development of secondary knee, hip, and low back pain during treatment protocol.

#### 1. Introduction

Orthopedic walking boots have been widely used in place of traditional fiberglass casts for orthopedic injuries such as severe ankle sprains, stress fractures, complete foot and ankle fractures, chronic tendinopathy, and post-surgical interventions [1,2]. While orthopedic walking boots may provide advantages over traditional casts such as being less expensive and easier to remove for exercise and edema treatment [1], the boot elevates one limb relative to the other, creating a leg length discrepancy (LLD).

LLD has been shown to alter the kinematics and kinetics of gait [3–6]. With an orthopedic walking boot treatment protocol time span of one to three months, there may be adaptations in the gait cycle that lead to knee, hip, or back pain. In fact, LLD's have been associated with lumbar and lower limb conditions such as: foot over pronation [7], plantar fasciitis [8], low back pain [9–11], scoliosis [12], and osteoarthritis of the hip and knee joints [13–16]. Murray & Azari [17] recently summarized the etiology of lumbar disc degeneration and osteoarthritis of the hip and knee and how LLD is contributing to those conditions.

Since previous research suggests that LLD is associated with low back pain and lower extremity osteoarthritis, a more detailed examination of the lower extremities, pelvis, and spine during gait while wearing a walking boot is warranted. Only two previous studies have examined gait biomechanics with an orthopedic walking boot [1,2]. However, they did not report any results of spine or non-involved lower limb, leaving the impact on the overall kinetic chain incomplete. Thus, there is a need to examine three-dimensional kinematics and kinetics of the both lower limbs, pelvis, and spine while walking with and without an orthopedic walking boot. The purpose of this study was to examine the bilateral spatial-temporal characteristics, kinematics, and kinetics during walking with and without an orthopedic walking boot.

#### 2. Methods

Participants: Forty participants (m = 20, f = 20: age  $20.7 \pm 1.8$  yrs., ht. 171.6  $\pm$  9.5 cm, wt. 73.2  $\pm$  11.0 kg, BMI 24.8  $\pm$  3.2) reported to the Biomechanics Laboratory on one occasion. Each participant signed a consent form approved by the Institutes Research Review Board. Inclusion criteria consisted of: no neurological condition that affected gait, no previous lower extremity surgeries, no lower extremity physical therapy within six months.

Instrumentation: An eight camera (MX-T40) Vicon Motion Capture

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#### Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.30 Page 10 of 24

H. Gulgin et al.

#### a. Boot Markers

b. Condition 1

c. Condition 3

Fig. 1. Boot Markers & Processed Static

Gait & Posture 59 (2018) 76–82





System (Vicon, Oxford, UK) and two AMTI force plates (Advanced Mechanical Technology Inc., Watertown, MA) were utilized to capture the kinematic and kinetic data. Cameras captured motion at 120 Hz and the force plates collected at 1200 Hz. A Vicon Plug-in-Gait (PIG) Full Body marker set (14 mm) was used along with a virtual knee alignment device (KAD) created by medial knee markers.

Procedures: Anthropometric measures were taken prior to having the PIG full body set of reflective markers placed on their skin. Female participants wore a sport bra and black spandex shorts, while male participants wore black spandex shorts and went shirtless. All participants were fitted with a pair of New Balance running shoes (Men's 1980GB, Women's 1980PP) that had a sole depth of 2.6 cm with weight of 0.21 kg and 0.18 kg respectively. For the walking trials utilizing the orthopedic walking boot, participants were fitted for a small, medium, or large Air Cast Walking Brace (Better Brace, Canada). Boot marker placement is shown in Fig. 1a. The walking boots had a sole depth of 5 cm and weighed 0.9 kg (small), 1.2 kg (medium), and 1.4 kg (large). A new static trial was captured prior to each of the different walking conditions. Participants were instructed to walk down a 10-m runway at their natural walking pace. For condition one, each participant wore the provided running shoes. For condition two, participants wore the orthopedic walking boot on right foot and running shoe on left foot. The boot width was measured at the ankle and entered as new ankle width for subject metrics in Nexus 2.2.3 software (Vicon, Oxford, UK). For condition three, participants wore the orthopedic walking boot on right foot and left foot was barefoot. When wearing the boot, the medial and lateral malleoli were palpated to ensure that the foot marker set was in same location as baseline condition. Once the toe marker was placed on the boot, the heel marker was placed at the same height (in line anterior to posterior). Since the medial knee and ankle markers are removed after static trials, the primary investigator used an ink pen to draw a circle around those markers so they could be placed in the same location across all conditions.

Processing: Vicon Nexus 2.2.3 was utilized to capture, reconstruct (Fig. 1b & c), manually label, and filter (Woltring, MSE 15) all trials. A 4th order Butterworth filter with 10 Hz cut-off [18] was applied to force data. Original walking trials were cut down to one gait cycle for the right and left sides and exported into Visual 3D software (C-Motion Inc., Germantown, MD). In Visual 3D, the added weight of the boot (0.9, 1.2, or 1.4 kg) and shoe (0.21 or 0.18 kg) was accounted for when calculating the internal joint moments during the walking boot trials. Half of the additional boot weight was applied to the shank and other half applied to the foot segment. The Davis method was used to estimate hip joint center. Visual 3D pipelines were performed to create norm bars for each condition (Figs. 2–3), as well as calculate peak joint moments during stance phase (0–40% of gait cycle).

Data Analysis: Descriptive statistics were calculated in SAS 9.4 (Cary, NC). Peak values for kinematic and kinetic variables were tested



Trials.

for significance (p < 0.05) across conditions using One-way Repeated ANOVA with Bonferoni procedure. Follow-up paired *t*-tests were performed to test for right to left differences.

#### 3. Results

#### 3.1. Part 1: kinematics

Spatial-temporal characteristics and peak joint angles are shown in Tables 1–2. Walking velocity decreased significantly (9–13%) when wearing the boot, with little change in step length. Kinematic normal curves for all conditions are shown in Fig. 2. There were significant increases in peak pelvic and thorax motions in all three planes. At the hip and knee joints, there were significant differences in sagittal, frontal, and transverse plane movements in the long limb, but no difference in hip or knee transverse plane motion in short limb.

#### 3.2. Part 2: kinetics

Peak ground reaction forces and internal joint moments are shown in Table 3. Kinetic normal curves for all conditions are shown in Fig. 3. Peak vertical ground reaction forces were decreased slightly on long limb (2–3%), but were significant. Peak anterior-posterior (braking and propulsive) ground reaction forces differed significantly across conditions and side.

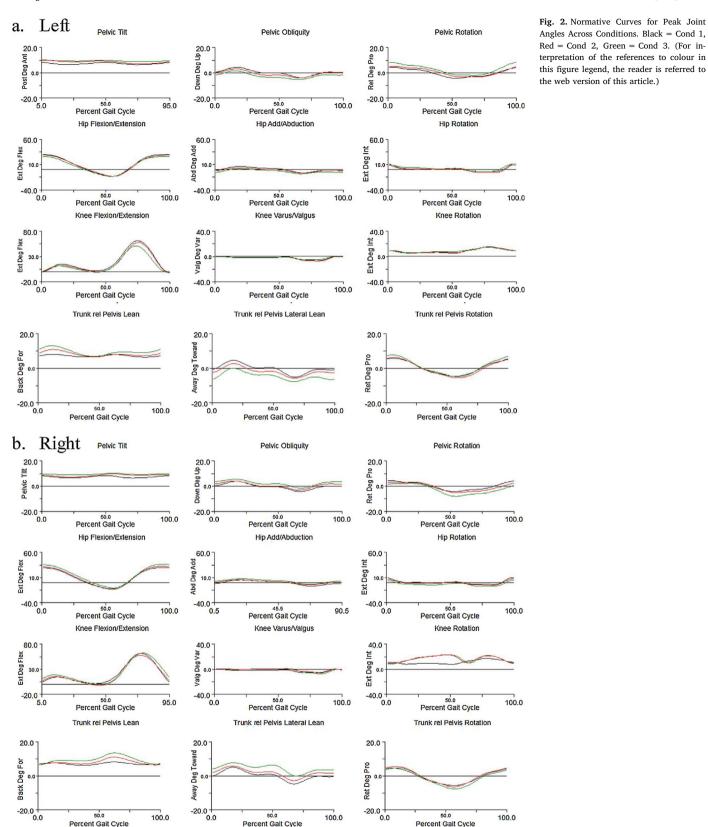
At the hip and knee joint, both limbs had significant differences in the sagittal, frontal, and transverse plane joint moments with the exception of the short limb frontal plane moment.

#### 4. Discussion

While Tables 2-3 have reported right and left limbs, for discussion purposes the long limb will always refer to the right limb and the short limb will always refer to the left limb. Two previous studies have examined gait kinematics and kinetics while wearing an orthopedic walking boot [1,2], but only reported joint angles and moments for the limb wearing the boot, leaving an incomplete picture of how the walking boot may alter the contralateral limb or overall kinetic chain. Pollo et al. [1] analyzed lower leg joint angles and external joint moments in 10 healthy subjects (m = 6, f = 4) while wearing four different walking boots, a synthetic cast, and a normal shoe condition. One boot was exactly same sole depth as shoe condition, and the other three boots created LLD of 1.9 cm, 2.3 cm, and 3.5 cm. In the current study, we created a LLD of 2.4 cm and 5.0 cm respectively. Pollo et al. [1] found no kinematic changes in the hip or knee joints in the sagittal or frontal planes, and a slight increase in anterior pelvic tilt with the boot conditions. Conversely, our study found significant changes in hip and knee joints in sagittal, frontal, and transverse planes. Kinetically, Pollo

#### Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.31 Page 11 of 24

H. Gulgin et al.



significant decrease in the hip abductor moment (increased hip adductor moment) when wearing the boot. Furthermore, the shorter limb did not have a difference in hip abductor moment, thus it is mainly the

longer limb that is affected. Pollo et al. [1] also found that the external

knee adductor moment was increased for two of the boot conditions

and cast, with concern for maintaining appropriate loads on the medial

Gait & Posture 59 (2018) 76-82

et al. [1] did not find any significant differences in hip flexion/extension moments between walking boots and shoe condition, but three of the four boot conditions had a significant decrease in hip abductor moments (increased adductor moment) compared to shoe condition. The current study was in agreement for the longer limb in that it experienced a very little change in the hip extensor moment, and had a

#### H. Gulgin et al.

Ground Reaction Forces a. **Right Ground Reaction Force** Left Ground Reaction Force Vertical Forc Vertical Forc 1.6 1.6 % BM BW 50 0 Percent Gait Cycle 500 Percent Gait Cycle Braking/Propulson Forre 0.30 Prop BW srak % BW Brak % -0.30+ 0.0 -0.30+ 0.0 so o Percent Gait Cycle to o Percent Gait Cycle Medial/Lateral Force Medial/Lateral For 0.30 0.30 at Med % BW Lat Med % BW -0.30+ 0.0 -0.30+ tá o Percent Gait Cycle 500 Percent Gait Cycle b. Joint Moments Left Joint Moments Hip Ext/Elex Moment Hip ABd/ADd Moment 1.6 1.6 Add Nm/KG Abd Flex Nm/KG Ext -1.6 + 0.0 -1.6 + 0.0 100.0 100.0 50.0 Percent Gait Cycle 50.0 Percent Gait Cycle Knee Ext/Flex Moment Knee Valg/Var Moment 1.6 1.6 Nm/KG Valg Flex Nm/KG Ext Var N -1.6 + 0.0 -1.6 + 0.0 50.0 Percent Gait Cycle 50.0 Percent Gait Cycle 100.0 100.0 **Right Joint Moments** Hip Ext/Flex Moment Hip ABd/ADd Moment 1.6 1.6 Flex Nm/KG Ext Add Nm/KG Abd 0 -1.6 + 0.0 -1.6+ 50.0 50.0 100.0 100.0 Percent Gait Cycle Percent Gait Cycle Knee Ext/Flex Moment Knee Valg/Var Moment 1.6 1.6 Var Nm/KG Valg Flex Nm/KG Ext ٥. 0.0 -1.6 <del>+</del> 0.0 -1.6 + 0.0

Fig. 3. Normative Curves for Peak Kinetics Across Conditions. Black = Cond 1, Red = Cond 2, Green = Cond 3. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

100.0

and lateral compartments of the knee. While Pollo et al. [1] reported external adductor moments, our findings are in support, in that we found a significant change in the frontal plane internal knee joint moment with a decrease in the longer limb knee abductor moment

50.0 Percent Gait Cycle

(increase in knee adductor moment), altering the medial and lateral loading at the knee when wearing an orthopedic boot. Additionally, we found that the contralateral knee abductor moments did not change. Thus, there appears to be a larger effect on the longer limb frontal plane

100.0

50.0 Percent Gait Cycle

Gait & Posture 59 (2018) 76-82

#### Table 1 Spatial-Temporal Characteristics.

Gait & Posture 59 (2018) 76-82

Cond	Vel (m/s)	CT (s)	SW (m)	Left SL (m)	Right SL (m)
1	$1.28 \pm 0.09$	$1.11 \pm 0.07$	$0.13 \pm 0.02$	$0.71 \pm 0.04$	$0.71 \pm 0.04$
2	1.17 ± 0.09 <sup>^</sup> (↓9)	1.19 ± 0.07 <sup>^</sup> (†6)	0.14 ± 0.03 <sup>^</sup> (†8)	0.68 ± 0.04 <sup>^</sup> (↓4)	0.70 ± 0.04 <sup>^</sup> (1)
3	1.11 ± 0.10 <sup>^</sup> (↓13)	1.21 ± 0.08^ (†9)	0.15 ± 0.02 <sup>^</sup> (†15)	0.66 ± 0.05 <sup>^</sup> (↓7)	0.68 ± 0.05 <sup>(14)</sup>

Cond 1 = Bilateral Shod, 2 = R Boot L Shod, 3 = R Boot L Barefoot.

Vel = walking velocity, CT = cycle time, SW = step width, SL = step length.

() = % difference from baseline Condition 1.

^significant difference (p  $\,<\,$  0.05) from baseline Condition 1.

\*significant difference (p < 0.05) from left to right sides.

#### hip and knee joint moments.

A more recent three-dimensional biomechanical study by Zhang et al. [2] examined 11 healthy participants (m = 6, f = 5) while wearing two different walking boots (sole depth of 3.2 cm and 3.6 cm) and compared it to a baseline shoe condition (sole depth of 2.4 cm), creating a small LLD of 0.8 to 1.2 cm). Kinematically, Zhang et al. [2] found significant differences in lower extremity kinematics in the sagittal plane, but did not find any significant differences in hip or knee adduction. In the long limb, the current study found significant differences in peak knee flexion, hip adduction, and knee adduction across conditions, as well as side-to-side differences (Table 2). Furthermore, our study also examined the kinematics of the pelvis and thorax, finding significant differences in the pelvic tilt, obliquity, and rotation when wearing the boot. The pelvis protracts toward the longer limb and the thorax laterally flexes toward the long limb. This combination of pelvic rotation and thorax lateral flexion place an asymmetric loading on the spinal motion segments, and has been associated with disc degeneration [17].

Kinetically, Zhang et al. [2] found that there was no significant difference in peak vertical GRF's. The current study found a significant but small difference (1–3%) in vertical GRF's (Table 3). Additionally, the current study found significant decreases in the anterior/posterior GRF's, with the largest effect on the long limb propulsive forces.

Zhang et al. [2] also found that both walking boots increased the internal knee extensor moment and suggest that this may lead to increased loading applied at the knee joint. For the longer limb, we also

found an increase in knee extensor moment during the loading response, but found a decreased knee extensor moment in the shorter (contralateral) limb. This asymmetrical finding makes sense in that the longer limb experiences more knee flexion, creating larger internal extensor moments and the shorter limb has less knee flexion, decreasing the extensor moments. Pollo et al. [1] suggested that higher external flexor moments (same as our internal extensor moments) require greater muscle force from the knee extensors leading to increased forces at tibiofemoral and patellofemoral joints. Zhang et al. [2] suggested that the increase knee extensor moment on the longer limb may be result of knee extensors exerting more torque to raise the center of mass for smooth transition through mid-stance. Regardless, the current study found sagittal plane asymmetry with the boot, as the opposing knee joints are experiencing various levels of loading while wearing the orthopedic boot (Table 3). The LLD created by the walking boots may require the knee extensor muscles to generate more force on long limb and is something to consider if patients wearing the boot complain of knee pain on the longer limb.

In the frontal plane, Zhang et al. [2] found decreased peak internal hip abduction and knee abduction moments in both boots compared to the shoe condition matching our findings on the long limb. Furthermore, we saw no difference in either knee or hip frontal plane moments on the shorter limb. Thus, for the long limb, our results would agree that the medial-lateral knee compartment loading, as well as the hip joint articulating surfaces are altered when wearing the boot.

Regarding the literature on LLD, Gofton [13] identified that due to

Table 2
Peak Joint Angles During Stance Phase.

Knee Joint a. Cond R Flex L Abd R Abd L Flex L Int Rot R Int Rot 151 + 62 $14.9 \pm 5.8$ -0.95 + 3.7-14 + 38 $10.1 \pm 7.4$  $12.2 \pm 7.6$ 1 2 12.3 ± 4.5<sup>^</sup> (↓19) 15.7 ± 4.6\* (†5)  $-1.3 \pm 3.8^{\circ}(\uparrow 37)$  $0.3 \pm 3.8^{*}(\downarrow 121)$  $10.2 \pm 7.0(\uparrow < 1)$  $21.8 \pm 9.1^{*}(\uparrow 79)$ 3 19.1 ± 4.4<sup>\*</sup>(†28) -1.3 ± 3.8^ (†37)  $-0.02 \pm 4.3^{*}(\downarrow 98)$  $10.2 \pm 7.0(\uparrow < 1)$ 21.8 ± 9.4<sup>\*</sup>(†79)  $11.9 \pm 4.6^{(121)}$ b. Hip Joint Cond L Flex R Flex L Add R Add L Int Rot R Int Rot  $30.3 \pm 6.0$  $29.9 \pm 6.2$  $6.4 \pm 3.3$  $5.7 \pm 3.9$  $11.1 \pm 7.8$ 9.9 ± 7.6 1 29.0 ± 6.0<sup>(14)</sup> 2  $31.8 + 5.9^{*}(16)$  $38 + 34^{(140)}$ 5.8 ± 4.0\* (12) 9.3 ± 6.7(116) 7.6 ± 7.4<sup>^</sup> (123) 3 26.4 ± 5.9<sup>^</sup> (↓13) 35.9 ± 6.4<sup>\*</sup>(<sup>1</sup>20) 1.9 ± 3.4<sup>^</sup> (↓70) 7.9 ± 3.9<sup>\*</sup>(†39)  $10.8 \pm 7.2(\downarrow 3)$ 5.0 ± 8.2<sup>\*</sup>(↓49) Pelvis c. Cond L Tilt R Tilt L Abd R Abd L Prot R Prot 1 8.9 ± 4.7  $8.5 \pm 4.9^{*}$  $4.5 \pm 1.9$  $4.0~\pm~2.1$  $4.8 \pm 3.0$  $4.9 \pm 3.1$ 2  $10.4 \pm 5.1^{(\uparrow 17)}$  $9.3 \pm 4.9^{*}(\uparrow 9)$  $3.2 \pm 2.0^{\circ} (\downarrow 29)$  $4.2 \pm 2.2^{*}$  (15) 5.8 ± 2.8<sup>^</sup> (†21) 4.3 ± 3.3 (112) 3  $11.0 \pm 5.1^{(124)}$  $10.5 \pm 5.1^{*}(\uparrow 24)$  $1.8 \pm 2.2^{(\downarrow 60)}$  $5.7 \pm 2.1^{*}(\uparrow 43)$  $8.8 \pm 3.1^{\circ}(183)$  $3.2 \pm 3.4^{*}(\downarrow 35)$ d. Trunk Relative to Pelvis Cond L Flex R Flex L Lat Flex R Lat Flex L Prot R Prot 1  $8.5 \pm 6.4$  $8.2 \pm 6.5$  $4.8 \pm 2.1$  $5.3 \pm 2.3$  $5.8 \pm 3.7$  $4.7 \pm 3.1$ 2  $11.2 \pm 6.8^{(132)}$ 8.6 ± 6.5\* (†5)  $2.9 \pm 2.8^{(1)}(40)$  $6.0 \pm 2.5^{*}(\uparrow 13)$  $6.5 \pm 3.1^{(12)}$  $5.7 \pm 3.1^{(121)}$  $13.4 \pm 6.8^{\circ}(158)$  $8.0 \pm 2.4^{*}(\uparrow 51)$ 7.8 ± 2.8<sup>^</sup> (†34) 5.1 ± 3.3\*(19) 3  $10.0 \pm 6.4^{*}(122)$  $0.21 \pm 2.6^{(195)}$ 

Cond 1 = Bilateral Shod, 2 = R Boot L Shod, 3 = R Boot L Barefoot.

() = % difference from baseline Condition 1.

^significant difference (p < 0.05) from baseline Condition 1.

\*significant difference (p < 0.05) from left to right sides.

Note for Table 2: For Frontal plane knee motion the Average value in Loading Phase was used and not Peak Value (the peak was very close to zero and some were in abduction and others in adduction, thus cancelling out).

H. Gulgin et al.

Table 3
Peak Kinetics.

Gait & Posture 59 (2018) 76-82

a.	Left Ground	Reaction Forces	(Nm/kg)	
Cond	Vertical 1	Vertical 2	Braking	Propulsion
1	$1.08 \pm 0.06$	$1.09 \pm 0.05^{\circ}$	$-0.18 \pm 0.03$	$0.18 \pm 0.02$
2	1.07 ± 0.07 (1)	1.07 ± 0.06 <sup>^</sup> (\dot 2)	$-0.14 \pm 0.03^{\circ} (\downarrow 22)$	0.17 ± 0.03 <sup>^</sup> (↓6)
3	1.07 ± 0.05 (↓1)	1.07 ± 0.07 <sup>^</sup> (\2)	$-0.13 \pm 0.03^{\circ} (\downarrow 28)$	0.17 ± 0.03 <sup>^</sup> (↓6)
b.	Right Ground	Reaction Forces	(Nm/kg)	
Cond	Vertical 1	Vertical 2	Braking	Propulsion
1	$1.08 \pm 0.06$	$1.09 \pm 0.05$	$-0.18 \pm 0.03$	$0.19 \pm 0.02$
2	$1.05 \pm 0.05^{\circ} (\downarrow 3)$	$1.08 \pm 0.06 (\downarrow 1)$	$-0.15 \pm 0.03^{*} (\downarrow 17)$	$0.13 \pm 0.03^{*}(\downarrow 32)$
3	1.06 ± 0.04 <sup>^</sup> (\2)	1.06 ± 0.05 <sup>^</sup> (↓3)	$-0.15 \pm 0.03^{*} (\downarrow 17)$	$0.14 \pm 0.03^{*}(\downarrow 26)$
c.	Joint Moments	(Nm/BW)	Sagittal Plane	
Cond	L Knee Ext	R Knee Ext	L Hip Ext	R Hip Ext
1	$0.44 \pm 0.21$	$0.42 \pm 0.22$	$0.52 \pm 0.11$	$0.49 \pm 0.11$
2	$0.24 \pm 0.17^{(145)}$	0.50 ± 0.15 <sup>*</sup> (†19)	0.57 ± 0.11 <sup>^</sup> (†10)	0.46 ± 0.10 <sup>*</sup> (↓6)
3	0.22 ± 0.18 <sup>^</sup> (↓50)	0.54 ± 0.16 <sup>*</sup> (†29)	0.37 ± 0.11 <sup>^</sup> (†29)	0.46 ± 0.11 <sup>*</sup> (↓6)
d.	Joint Moments	(Nm/BW)	Frontal Plane	
Cond	L Knee Abd	R Knee Abd	L Hip Abd	R Hip Abd
1	$0.45 \pm 0.12$	$0.37 \pm 0.09^{*}$	$0.88 \pm 0.13$	$0.73 \pm 0.15^{*}$
2	0.46 ± 0.12 (†2)	0.28 ± 0.09 <sup>*</sup> (↓24)	0.87 ± 0.14 (1)	0.65 ± 0.13 <sup>*</sup> (11)
3	$0.44 \pm 0.12 (\downarrow 2)$	$0.29 \pm 0.11^{*} (\downarrow 22)$	0.87 ± 0.13 (\1)	0.66 ± 0.13 <sup>*</sup> (10)
e.	Joint Moments	(Nm/BW)	Transverse Plane	
Cond	L Knee Int Rot	R Knee Int Rot	L Hip Int Rot	R Hip Int Rot
1	$-0.09 \pm 0.05$	$-0.08 \pm 0.02^{*}$	$-0.03 \pm 0.03$	$-0.06 \pm 0.03^{*}$
2	$-0.09 \pm 0.04$	$-0.07 \pm 0.02^{*} (\downarrow 13)$	$-0.02 \pm 0.03^{\circ} (\downarrow 33)$	$-0.05 \pm 0.02^{*} (\downarrow 17)$
3	$-0.06 \pm 0.04^{\circ} (\downarrow 33)$	$-0.05 \pm 0.01^{*} (\downarrow 38)$	$-0.01 \pm 0.03^{\circ} (\downarrow 66)$	$-0.07 \pm 0.03^{*} (\uparrow 17)$

Note for a-b:

Vertical 1 = represents peak during initial loading.

Vertical 2 = represents peak during propulsion phase.

Note for a-e:

Cond 1 = Bilateral Shod, 2 = R Boot L Shod, 3 = R Boot L Barefoot.

the pelvic tilt and rotation found in LLD, the hip joint of longer limb is in an adducted position, which has been suggested to decrease the load bearing articular surface of the hip putting greater stress on the chondral surface, thus promoting unilateral arthrosis in the hip of the longer limb. Gofton [13] examined 100 patients that underwent hip replacement and found that OA had prevalence rate of 84% on longer limb. Friberg [9] examined several Finnish military patients with chronic pain and found that 89.9% of patients reported pain on the longer leg. Additionally, LLD of 1.2-3.5 cm have been associated with arthritis of the hip on side with longer limb [13]. Our study found significant increases in peak hip adduction angles in the long limb, supporting previous literature, and thus raising the question of whether or not clinicians should allow patients to walk in this compensated posture over the duration of the treatment time, exposing the longer limb hip to greater stress. Furthermore, Wesseling et al. [19] stated that hip and pelvic kinematics have the largest effect on hip joint contact forces. Increased hip adduction and increased pelvic obliquity increase hip contact forces. In the current study, the authors found an increase in pelvic obliquity along with increased hip adduction. While not directly measuring contact forces we could infer that these kinematic changes alone would put increased contact forces on the longer limb hip joint. While temporary use of the orthopedic walking boot may not result in osteoarthritis, the joint loading changes may initiate joint pain in the longer limb.

The combination of the external knee adductor moment (KAM) and knee flexor moment (KFM) have been shown to account for 85% of medial compartment contact force [20], and the authors concluded that when peak KAM and peak KFM increase or decrease in the same direction one can be confident that medial loading will change in a similar direction. As a result of wearing the orthopedic boot, the ipsilateral knee joint may be experiencing higher medial compartment loading based on the increased knee adductor moment (decreased internal knee abductor moment) and increased knee flexor moment (increased internal knee extensor moment). While the peak knee flexor moment can account for 22% of medial compartment loading [20], it is the knee adductor moment that contributes more to medial compartment loading and the OA progression [21,22]. Thus, over a one to three-month treatment protocol, wearing the orthopedic walking boot may cause knee pain as a result of this increased medial knee loading. The contralateral (short) limb had a much higher increase in peak knee flexor moments (which alone can account for 22% of medial compartment loading [20], but did not experience as much increase in knee adductor moment (2%) compared to the ipsilateral knee adductor moment (22–24%). Thus, there may be less risk of medial compartment pain on the contralateral knee joint.

Kakushima et al. [3] examined the effect of leg length discrepancy on the spinal motion during gait by measuring 22 healthy females with and without a 3 cm heel raising orthotic device and found that the thoracic spine had increase of  $1.2^{\circ}$  of lateral bending and lumbar spine had  $2.0^{\circ}$  increase. Thus, the authors concluded that with the LLD the spine is likely exposed to larger lateral bending stress. The current study found a  $4.5^{\circ}$  increase (with 5 cm LLD) in thorax lateral flexion relative to pelvis toward the longer limb. It is notable that an increase in frontal plane spinal motion combined with the pelvic rotation is associated with disc degeneration [17]. However, what is unclear is how long it takes to manifest clinical symptoms or pathology.

A limitation of the study was that the subject population was unaffected by any lower extremity injury. Thus, patients with an existing lower extremity injury may alter their gait in other ways when wearing the boot. However, the purpose of this study was to quantify the lower extremity, pelvis, and thorax movements of non-injured participants when wearing the boot to determine the overall effect on the body's kinetic chain, which has not been previously reported. Other limitations were that walking speed was not controlled for and that the movement pattern was new. While allowing a familiarization period, it is possible that participants might walk differently with longer use. Future research should control for walking speed across conditions when analyzing the kinematics with and without the walking boot and as well as identifying if current patients being treated with the walking boot experience pain in other joints of the body during the treatment protocol.

#### Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.35 Page 15 of 24

#### H. Gulgin et al.

In summary, the current study expands the knowledge of previous findings by reporting not only the involved longer limb, but also the contralateral limb kinematics and kinetics when wearing an orthopedic walking boot.

#### 5. Conclusion

The walking boot created gait asymmetries in lower extremity joint angles and moments, which may result in secondary pain in more proximal regions of the body, such as in the hip, knee, or thorax. The authors suggest a re-design of the boot with the aim to reduce the level of LLD and gait asymmetries.

#### Conflict of interest

The authors acknowledge there is no conflict of interest and have not been paid for their work.

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#### References

- F.E. Pollo, T.L. Gowling, R.W. Jackson, Walking boot design: a gait analysis study, Orthopedics 22 (1999) 503–507.
- [2] S. Zhang, K.G. Clowers, D. Powell, Ground reaction force and 3D biomechanical characteristics of walking in short-leg walkers, Gait Posture 24 (2006) 487–492.
- [3] M. Kakushima, K. Miyamoto, K. Shimizu, The effect of leg length discrepancy on spinal motion during gait, Spine 28 (2003) 2472–2476.
   [4] R. Needham, N. Chockalingam, D. Dunning, A. Healy, E.B. Ahmed, A. Ward, The
- [4] R. Needham, N. Chockalingam, D. Dunning, A. Healy, E.B. Ahmed, A. Ward, The effect of leg length discrepancy on pelvis and spine kinematics during gait, Stud. Health Technol. Inform. 176 (2012) 104–107.

[5] M. Walsh, P. Connolly, A. Jenkinson, T. O'Brian, Leg length discrepancy – an experimental study of compensatory changes in three dimensions using gait analysis, Gait Posture 12 (2000) 156–161.

Gait & Posture 59 (2018) 76-82

- [6] P. Wretenberg, A. Hugo, E. Brostrom, Hip joint load in relation to leg length discrepancy, Med. Dev.: Evid. Res. 1 (2008) 13–18.
- [7] S. Subotnick, Limb length discrepancies of the lower extremity (the short leg syndrome), J. Orthop. Sports Phys. Ther. 3 (1981) 11–16.
- [8] S. Mahmood, L. Huffman, J. Harris, Limb-length discrepancy as a cause of plantar fasciitis, J. Am. Podiatr. Med. Assoc. 100 (2010) 452–455.
- [9] O. Friberg, Clinical symptoms and biomechanics of lumbar spine and hip joint in leg length inequality, Spine 8 (1983) 643–651.
- [10] L.G. Giles, K.P. Singer, Clinical Anatomy and Management of Low Back Pain, Butterworth-Heinemann, 1997, p. 411.
- [11] J. Gofton, Persistent low back pain and leg length disparity, J. Rheumatol. 12 (1985) 747–750.
- [12] T. Papaioannou, I. Stokes, J. Kenwright, Scoliosis associated with limb-length inequality, J. Bone Joint Surg. 64 (1982) 59–62.
- [13] J.P. Gofton, Studies in osteoarthritis of the hip: biomechanics and clinical considerations, Can. Med. Assoc. J. 104 (1971) 1007–1011.
- [14] Y.M. Golightly, K.D. Allen, C.G. Helmick, J.B. Renner, J.M. Jordan, Symptoms of the knee and hip in individuals with and without limb length inequality, Osteoarthr. Cartil. 17 (2009) 596–600.
- [15] W.F. Harvey, M. Yang, T.D. Cooke, N.A. Segal, N. Lane, C.E. Lewis, et al., Association of leg-length inequality with knee osteoarthritis: a cohort study, Ann. Intern. Med. 152 (2010) 287–295.
- [16] K. Tallroth, M. Ylikoski, H. Lamminen, K. Ruohonen, Preoperative leg-length inequality and hip osteoarthrosis: a radiographic study of 100 consecutive arthroplasty patients, Skeletal Radiol. 34 (2005) 136–139.
- [17] K.J. Murray, M.F. Azari, Leg length discrepancy and osteoarthritis in the knee, hip, and lumbar spine, J. Can. Chiropr. Assoc. 59 (2015) 226–238.
- [18] S. Schreven, P.J. Beek, J. Smeets, Optimizing filtering parameters for a 3D motion analysis system, J. Electromyogr. Kinesiol. 25 (2015) 808–814.
- [19] M. Wesseling, F. Groote, C. Meyer, K. Corten, J.P. Simon, K. Desloovere, et al., Gait alterations to effectively reduce hip contact forces, J. Orthop. Res. 33 (2015) 1094–1102.
- [20] K. Manal, E. Gardinier, T. Buchanan, L. Snyder-Mackler, A more informed evaluation of medial compartment loading: the combined use of the knee adduction and flexor moments, Osteoarthr. Cartil. 23 (2015) 1107–1111.
- [21] A.H. Chang, K.C. Moisio, J.S. Chmiel, F. Eckstein, A. Guermazi, P.V. Prasad, et al., External knee adduction and flexion moments during gait and medial tibiofemoral disease progression in knee osteoarthritis, Osteoarthr. Cartil. 23 (2015) 1099–1106.
- [22] A.J. Baliunas, D.E. Hurwitz, A.B. Ryals, A. Karrar, J.P. Case, J.A. Block, et al., Increased knee joint loads during walking are present in subjects with knee osteoarthritis, Osteoarthr. Cartil. 10 (2002) 573–579.

Case 3:18-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.36 Page 16 of 24

# Exhibit D EvenUp Consumer Reviews showing Causation

#### 

By Donna F. on August 29, 2018

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

This did what it was supposed to. Without wearing the Evenup, my hip and back were hurting from walking with the aircast higher than my sneaker. It's not attractive though and looks very "orthopedic" and yeah my niece laughed at me. Nothing attractive about my Aircast either!

★★★★★ This helped me function in a busy life mostly without back/hip pain

By Amazon Customer on September 24, 2018 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

I cracked and tore ligaments in my right ankle a day before flying to CA from MN...my Aircast boot was a lifesaver to continue life and travel but I was uneven in gait, back and right hip hurt, yes right hip...d/t the uneven gait. Long story short, this product provided much relief. Do not wear a cast boot without this to even up your gait. There is a removable velcro level of the shoe to help meet your appropriate bilateral stance. The strap over the top keeps it secure on whatever shoe you wear. It's simple to apply and wear. I am 8.5 wide nursing shoe. I bought the 9 size for fear the lesser size would be too short. So a half size bigger than my actual shoe. It was a good choice because I have a wide foot. Take care of your back and hip joints when you have a cast. Even up!

🕑 Helpful 🛛 🗠 Comment 🔹 Report abuse

#### \*\*

By Todd E. on August 11, 2018

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Wore an Aircast boot for 12 weeks and this is a must to keep your legs the same length due to the thick sole of the boot.

Helpful 
Comment Report abuse

#### ★★★★★ Best product ever!

By Judi Ross on July 20, 2018

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

I was in an aircast for six weeks. This product allowed me to raise the height of my opposite leg so I didn't experience leg and hip pain on opposite side while my torn Achilles' tendon healed. Works best on walking/running shoe. Get one!

Helpful 
Comment Report abuse

#### ★★★★★ Lifts you up!

By J. N. LeDuc on July 2, 2018

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

Makes a world of difference to bring your foot up to the same level as the other foot in an aircast aka walker boot. It easily fits and is adjustable for two heights. I bought a small because I needed it quickly. It is too small for size nine shoe lengthwise but does the trick. I needed a medium.

Helpful - Comment Report abuse

#### 🚖 🚖 🚖 🚖 Balancing Act

By bamanurse on July 1, 2018 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Great product to even up shoe height to Aircast boot!

🕑 Helpful 🛛 🗠 Comment 🔹 Report abuse

#### ★★★★★ Have aircast? Need Even-Up!

By Born2bBlue on June 28, 2018

Size: Large (Shoe Size: Men's 11 - 13 / Women's 11.5 - 13) Verified Purchase

#### Super product.

If you have an Air Cast and are doing the "duck waddle" when walking, this is the item you need.

It fits snuggly to your shoe and has a two level system to adjust the height.

It stays in place and does not slide or roll off.

I've been in an aircast 4 weeks and it has performed perfectly.

Recommended.

Helpful 

Comment Report abuse

#### ★★★★★ Immediate relief

By GoodVibes04 on June 14, 2018 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

Put this on and felt immediate relief and pressure alleviate from my hip and back. I got an aircast 2 weeks ago. removing one of the layers of the shoe gave me the perfect height.

#### ★★★☆☆ @eeee i@:1@-cv-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.38 Page 18 of 24 By Olive on June 12, 2018

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Received yesterday. My back has been killing me because I'm in an aircast for a broken right foot 2 weeks now. Hoping this helps but already I feel like they don't stay on securely and I could trip. Will update...

Helpful - Comment Report abuse

#### ★★★★★ Really helped with balance while walking

By Kimberly Hargrow on May 5, 2018 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

It works really well with balancing. I just had foot surgery and now I am in a aircast boot so I needed some more height for my sneaker on the other foot. This device helped me to not limp heavily and provided equal footing for partial to full weight bearing walking. I would highly recommend pro care evenup shoe balancer to anyone who has to wear a walking boot and need to level out height ratio.

Helpful 
Comment Report abuse

#### ★★★★☆ Great for obtaining a more even step

By JP on May 2, 2018 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

This product worked for getting an even step with wearing an Aircast boot. However, I felt it had a too much flexibility or movement within the sole bed when wearing a tennis shoe. Like the bands which hold your shoe are not wide or firm enough. It felt like I was repositioning my shoe on the bed of the sole after walking for several minutes.

🕑 Helpful 🛛 🗸 Comment 🔹 Report abuse

#### ★★★★★ Five Stars

By C Brewer on March 30, 2018 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

EvenUps do help level you when you are wearing an Aircast.

### Helpful ~ Comment Report abuse

#### ★★★☆☆ Sizing is off

By aabrand14 on March 25, 2018 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

This product does work. Definitely raises my shoe high enough to be even with my Aircast, but the sizing is completely off. I wear size 9 and got a medium according to their sizing. It was huge. A medium is supposedly (US) women's size 8.5-11, yet also men's size 9-11. That doesn't work. A size 9 in women's is a size 7 in men's. I have ordered a small, and hope that fits better.

Helpful - Comment Report abuse

★★★★ Five Stars
By Amanda M. Mejia on February 6, 2018
Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5)
Verified Purchase

This was a huge help with the Aircast boot. Definitely worth the cost!

Helpful 
Comment Report abuse

#### ★★★★★ Helps you back when using a walking boot

By Amazon Customer on January 25, 2018

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

It kept me from unbalancing my back when using Aircast FP walker brace. They work together. It helps you from adding more problems.

Helpful V Comment Report abuse

#### ★★★★☆ Relief from Back pain.

By GrandmaDi on January 19, 2018 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

What a great invention. My Orthopedic surgeon did not tell me in advance about the back and hip pain I'd experience while wearing an aircast for 3 months! The aircast makes one leg 1 to 1-1/2 inches longer than the other. So you are constantly walking off balance. So glad a nurse friend recommended I try this. My back pain was gone within two days of wearing the EvenUP device. My only complaint is that it kept slipping off on a leather oxford style shoe that I first tried to wear with it. It seems to only stay on my athletic style shoe. I have recommended it to a few others that are facing foot surgery.

Helpful V Comment Report abuse

#### 

Verified Purchase

This helped me a ton while wearing my aircast! I highly recommend this product! I spread the word to my doctors and PTs to recommend this to other patients! My only complaint is that the rubber and sole we're a bit more rugged as I'm on my feet a lot.

🕑 Helpful 🛛 🗠 Comment 🔹 Report abuse

#### ★★★★★ It works‼

By Patricia Carkoski on January 9, 2018 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

I recently underwent surgery on my ankle. And have had to wear an aircast boot. The uneven heights were causing discomfort in my knee that has arthritis.

I found this and decided to give it a try. It has worked perfectly!! It fits on my sneaker. And has relieved all of the discomfort in my knee I intend to show it to my orthopedic surgeon when I go back for my checkup.

😧 Helpful 🛛 🗸 Comment 🔹 Report abuse

★★★★★ Love this!
 By kismet on December 3, 2017
 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5)
 Verified Purchase

This makes walking around in an aircast/boot so much easier! Love it!

🕑 Helpful 🛛 🗸 Comment 🔹 Report abuse

★★★★★ you need to hire a better publicist. Everywhere I have gone

By Nancy Tompkins on December 1, 2017

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

Attention ProCare company...you need to hire a better publicist. Everywhere I have gone, including my podiatrist's office, people ask me about my Evenup. You seriously should sell these to podiatrists. What a lifesaver when I was wearing my Aircast boot...it saved my hips and my knees.

🕑 Helpful 🛛 🗸 Comment 🔹 Report abuse

#### ★★★★★ Perfect match for an AirCast!

By JBNY on October 12, 2017 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

This product is fantastic! I can now wear my AirCast without dislocating my other hip! I had to try on two different shoes and use the combination of the two Evenup inserts with them but I have now found the perfect combination with an Easy Spirit sneaker and both Evenup inserts. Perfect! I called my podiatrist to tell them about this product since they didn't seem to know it. The Evenup I purchased is a small, the same size as the AirCast. I wear a women's US size 8 shoe

2 people found this helpful

Helpful V Comment Report abuse

🛧 🛧 🛧 🛧 Great product 🤙

By Amazon Customer on September 11, 2017

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Love this product. It allows a perfectly even walk with your Aircast boot. Great comfort and traction as well.

🙂 Helpful 🛛 🗸 Comment 🔹 Report abuse

#### ★★★★★ No More Limping around

By Arthur Henderson on September 1, 2017

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

This item works very well with my AirCast Boot, I do not limp anymore from uneven soles. Highly recommend this product for people with Air Cast Boots or Soft cast boots.

🙂 Helpful 🛛 🗠 Comment 🔹 Report abuse

#### ★★★★★ This product saved my back!

By Joe Tarner on September 1, 2017 Size: Large (Shoe Size: Men's 11 - 13 / Women's 11.5 - 13) Verified Purchase

This product is amazing. For three months I had to wear an aircast boot due to an injury to my achilles. Walking unevenly was killing my back to the point that my back was hurting worse than my foot. So I was trying to find a more comfortable cast online and I happened to come across the Evenup. I doubted it would really work, but thought it was priced to give it a try. And I'm glad I did! It's actually made of two layers in the sole, one of which is detachable depending on whether you're wearing a boot or a cast. It fits more securely over the shoe than it looks like it might; it never once slipped off or caused any fit issues, nor did many people even notice I was wearing it. Using this product subsequently eliminated the back pain I was experiencing as a result of wearing the boot. I even ended up showing it to my doctor and recommending it for future patients. One of the best \$20 I've ever spent!

3 people found this helpful

Helpful V Comment Report abuse

#### 

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

I wasn't sure what to expect but I have worn this everyday since I received it. I broke my foot 2 months ago and when I was told I could start walking in my aircast I was concerned about the "penguin" walk due to the unevenness between the cast and a regular shoe. It's worked very well and is a very good product especially for the price.

Helpful 
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#### ★★★★★ Use it with an Aircast!

By Hockey Chick on August 2, 2017 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

Highly recommend this if you have to wear an air-cast on the other leg. Kept me from having to many hip/back problems the 6 weeks recovering from a broken foot. I had the small and it fit my 8.5 (US) foot fantastic!

Helpful Comment Report abuse

#### ★★★★★ Great product

By Amazon Customer on June 6, 2017

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Works as advertised. Really put an ease to your back. They should sell it as a pair with their aircast walking boot

Helpful ~ Comment Report abuse

#### ★ 🛧 🛧 🛧 Helpful

By SMT02151 on May 10, 2017 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

This item was very comfortable and useful with my aircast. Recommend to even out your walking. Definitely helped to lessen the discomfort.

Helpful V Comment Report abuse

#### ★★★★★ Perfect balance!

By Amazon Customer on April 24, 2017 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

This alone g with the aircast boot is the perfect balance.

Helpful 
Comment Report abuse

#### ★★★★★ Body saving product--AWESOME!!!

By Suzy Potaka on April 1, 2017 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

I only wish I knew about this product sooner!!! As someone else mentioned it ought to be "standard issue" if you are in an aircast!!

I broke 2 bones in my foot & have been in the cast for almost 3 mo. due to an odd break. (10 days to go!) As soon as I started walking unevenly I had a feeling that my body was NOT going to like this...sure enough I ended up w/severe sciatica in my good leg ;( TG for my awesome chiro!

Someone mentioned the "balancer" was too high compared to the aircast, yet you need to understand it comes w/an additional insert so you can gage the appropriate height for your needs. It may not be \*perfect\* yet when I removed the additional piece it was a better accommodation.

I saw other posts mentioning tripping or the balancer not staying on their shoe. I haven't tripped once & it stays on a sneaker perfectly. Checkout the photo of the product & the portion @ the tip of the toe adheres perfectly to a sneaker. Don't know if people were using it on regular shoes (?)

I can't believe something so inexpensive could be such a HUGE lifesaver!!!! After 2 mo. of use the product held up perfectly!!!

One person found this helpful

Helpful Comment | Report abuse

#### ★★★★★ Elevates my good foot to the level of the foot wearing the ...

By CeeGee 6 on March 6, 2017 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Elevates my good foot to the level of the foot wearing the Aircast. Eliminates back and hip pain. Thanks, love it.

Helpful 
Comment Report abuse

#### ★★★★★ @@@@@@&u@id@e@v-02393-BTM-KSC Document 1-2 Filed 10/18/18 PageID.41 Page 21 of 24 By Blue Skirt Waltz on March 4, 2017

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

I am in an AirCast Boot for at least another four weeks after breaking my leg in three places before Christmas. It was very difficult walking with the walker until I purchased the Shoe Balancer. The Evenup Shoe Balancer has made all the difference in the world to my recovery. I am so pleased with this product. My physical therapist said she was going to purchase some and keep them in her bag for her clients. I have had no problems with the product. Thank you ProCare. I, too, along with other reviewers, wish the orthopedic doctors would recommend this item to their patients who are learning to walk again after a fracture.

Helpful 
Comment Report abuse

#### $\star \star \star \star \star$ I have been asked several times where I purchased this ...

By Amazon Customer on February 14, 2017

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

I have been asked several times where I purchased this item; I can't believe that this is not promoted by health care professionals who prescribe wearing the aircast/boot as it is essential for keeping the hips aligned and maintaining a normal walking gait.

🕑 Helpful 🛛 🗸 Comment 🔹 Report abuse

#### ★★★★★ Got an Aircast? You need this!

By rjgtn1 on January 17, 2017

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

An absolute necessity for anyone in an Aircast. Without it, your "good" foot is far below the one in the cast, your hips are uneven, and you get about with more of a limp. Eventually your back with give out or get injured. I'm the envy of everyone at physical therapy who doesn't have one. Thanks, Amazon, for suggesting this when I ordered a leg elevator cushion!

Helpful V Comment Report abuse

#### ★★★★★ I would recommend it!

By Umisma on January 12, 2017 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

Great product! It helped me to walk more evenly with my aircast boot and so it saved me from hip and back pain I got prior to using it. A must have!

Helpful - Comment Report abuse

#### $\star$

By Joy B. on January 9, 2017

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5)

I ordered the small as directed per the size chart and when I placed the balancer on my shoe it collapsed into the outside of my shoe causing a painful pressure on the lateral side of my foot. I was very excited to receive this product, since wearing an aircast, my hips and back are causing much pain and discomfort. I'm returning this item. However, I've asked for a larger size in hopes that will take care of the issue.

Helpful V Comment Report abuse

#### ★★★★★ Must have when using aircast boot!

By Cmm27 on October 18, 2016

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Excellent solution when in an aircast boot and recovering from injury. I walk so much better with this. Very easy to use. I've never written a product review but this was so helpful I had to! My doctor, nurses, physical therapist all thought this was a great tool and asked for details to share with other patients.

Helpful V Comment Report abuse

#### ★★★★★ It worked great. Helped to eliminate hip pain caused when walking ...

#### By Sherry on August 13, 2018

Verified Purchase

Purchased after foot and leg surgery to wear along side my surgery aircast boot. It worked great. Helped to eliminate hip pain caused when walking with the boot and kept my hips even. I used with a croc around the house so I could easily slip it on and off when sitting.

#### ★★★★★ **() 使きの時代: 10/18/18** PageID.42 Page 22 of 24 By Tmiller5 on February 6, 2016

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

I put this on and immediately it relieved the pain in my foot, hip, and back. These should be standard issue for anyone walking in a boot or air cast. I wear a women's size 9 tennis shoe and I tried both the small and medium Evenups. The small one didn't cover the whole sole of my shoe even though it was less than 10.5" so I went with the medium.



56 people found this helpful



#### ★★★★★ An essential product

By Sue Hamilton, The Fan Hitch on July 30, 2018 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

Fortunately, I have a low cut sneaker which, when fitted with the balancer, perfectly evens out my leg lengths while I wear an air cast walking boot. This makes all the difference in the world, taking excess pressure of spine, knees and hips. The shoe balancer size I chose was perfect, but it has to be something of a hit or miss with raising the shoe to a perfect matching orthopedically correct height. I did't need the insert that came with the shoe balancer. Not sure what I would have done, short of buying a new, lower shoe, if the shoe balancer without the additional sole was not right. I am mightily grateful that it was. Even if you're not sure of the outcome, this product is definitely worth a try. Walking around on two different leg lengths even for an hour, let alone many weeks, can be brutal and require using a walker or crutches.

Helpful - Comment Report abuse

#### ★★★★☆ Saves your back & hips!!!

By BLM-RN on September 13, 2018

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Due to a foot problem, I ended up with my left leg in a walking cast ("air cast"). Within a day, I was having hip and lower back pain from the unevenness of the cast and my work shoe, so my sister sent a link to this product. I needed it "same day," so I had to order a few extra items (score!), but I rec'd the EvenUp the same evening! It has been a life-saver, and I like that there's an insert that allows you to use it with thicker or thinner soled shoes. My ONLY complaint is that it's too big for shoes like "Converse" slip ons, so I can't wear it with those. If I have to be in the air cast much longer, I might order down a size to wear with my smaller soled shoes. Otherwise, it has been a true back/hip saver!

Helpful - Comment Report abuse

#### ★★★★★ Holy easier to walk in the boot, Batman!

By KJNB on November 18, 2017

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

I broke my ankle... spectacularly: 4 breaks, 3 bones, dislocation, surgery, 10 screws, 2 plates. 6 weeks of non weight bearing. I'm 2 weeks into partial, moving towards full, weight bearing. After trying a high heel on my good foot to walk alongside the boot..i tried this. Can we say, "night and day difference?" This thing totally evened my ENTIRE FOOT to the height of my boot (air cast with pump) instead of just the heel of the good foot. Makes the transition to walking so much easier. It is well worth the investment. And your back/hips/knees/chiropractor will thank you too.

One person found this helpful

Helpful V Comment Report abuse

#### ★★★★☆ It works wonderfully to keep my body even and prevent back issues ...

By SharonS on August 27, 2017

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

I have a stress fracture in my right leg so am wearing an air cast boot for 6 weeks. I knew of Evenup from a previous fracture and had used it successfully at that time. It works wonderfully to keep my body even and prevent back issues while healing as long as I am on even ground. I am a gardener and even with my boot still mow and do some yard work. It is here that I have the problem as the evenup needs a second strap to be useful for uneven ground. I knew this going in from prior usage, but will comment and only give 4 stars because of it. If you are looking for in house or any flat surface walking, it is fantastic.

One person found this helpful

Helpful V Comment Report abuse

★★★★★ This Evenup shoe balancer was a wonderful way to walk with a more natural and even ...

By Lisa on November 4, 2016

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Months after recovering from a hip surgery, I ended up in a boot for a different injury (on the same side of my body as the surgery). I was afraid to create additional stress on my hip and knew that I'd be limping for a while. This Evenup shoe balancer was a wonderful way to walk with a more natural and even gait. I wish that all orthopedists would sell it to you as soon as you receive the boot or air cast! I have reccommended this to everyone I see in a boot! Great and much needed product!!

I wear a size 8.5 running shoe, Brooks, I ordered the medium based on another review. I think that the small would have fit as well. I wasn't able to wear it with a shoe other than a sneaker.

One person found this helpful

Helpful 
Comment Report abuse

#### ★★★★★ @agee-36410-10/18/18 PageID.43 Page 23 of 24 By Benz on May 10, 2018

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

I broke my leg and had to wear an air cast for months I'm so thankful for this product, it saved my hip from being over compensating and evened up my gait. It's simple to use and well worth the physical benefits. It should b in every PT bag of goodies and every therapy establishment. No one I've met seems to even knew it existed however, once they saw me use it they were sold on how valuable it is as well as necessary. My therapist is going to recommend it to her other clients and I will certainly wear it in good health until my leg heals. Thank you for seeing the need in this product. A satisfied consumer!

Helpful 
Comment Report abuse

# ★★★★ This Saved Me! By Trudie on September 27, 2018 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

I've been in an air cast for over two months now. I've had hip replacement on the side opposite the one I had surgery on this time, plus my knee on that leg hurts me. I don't think I could have walked without this device. It makes me almost even when attached to an SAS Freetime shoe. (They are about like a sneaker or trainer type shoe.) It's really been helpful to me.

🕑 Helpful 🛛 🗸 Comment 🔹 Report abuse

#### ★★★★★ Extremely helpful!

By Sara S Ballard on May 3, 2018 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Having broken my foot and sprained my ankle, I've been in an air-cast boot for several weeks, and I wish I'd had one of these from the beginning! I tried staying off of my foot as much as possible, using a knee walker and a wheelchair, but there are times you have to use crutches (going up and down stairs, for instance). Now that I'm allowed to put weight on my foot, I'm doing more walking in the cast, and will eventually transition out of the cast. In the meantime, trying to walk with the cast on (even with crutches) was slow, difficult, and very hard on my back, due to being so imbalanced. I received my EvenUp Shoe Balancer today, and it has already made a huge difference! It's so much easier to have a more natural gait, and it's putting less strain on my back. I wish I'd known this product existed sooner!

Helpful V Comment Report abuse

#### ★★★★☆ It feels like it wouldn't last long but I wore it while ...

By Paula C on December 9, 2016

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

Needed "yesterday" as I was not expecting the drastic change in height from air cast to regular shoe. Runs small, especially if you are using it on a running shoe with a wider heel. The medium size fit 8 1/2 size shoe perfectly. This helped you walk almost level which saved my back and hips. It feels like it wouldn't last long but I wore it while raking leaves and cleaning up gardens for the winter. Would definitely recommend and suggested my doctor recommend this to everyone to prevent being "lopsided".

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#### ★★★★★ Fits. balanced things out great

By Shawn Updegraff on September 2, 2018

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

My knee and hip were killing me after a week of wearing my air cast. Got this and now at least my good leg is back to being good again. Fit my 8.5" shoe perfectly. Once in a while it will slip left/right when I'm walking, causing a little misstep but for a temporary thing, its great.

Helpful Y Comment Report abuse

#### ★ ★ ★ ★ ★ A MUST HAVE FOR ANYONE WITH AN AIR CAST OR BOOT!

By Mary Callender on September 23, 2017

Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

No one who has to wear any kind of air cast or boot for more than a few days should be without this! I didn't find it in time to avoid messing up my opposite knee and SI joints. Your gait is greatly affected by wearing an air cast or boot and your body will pay for it. I found it at the end of my recovery from Achilles tendon repair. MEASURE THE LENGHTH OF THE BOTTOM OF YOUR TENNIS SHOE TO GET YOUR TRUE SIZE. Your hips, knees, and pelvis will thank you!

Helpful ~ Comment Report abuse

#### ★★★★★ Highly recommend if you have an air cast!

By KLM on April 5, 2018

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

This EvenUp Shoe Balancer saved my back and hip when I broke a foot and had to wear an air cast. My podiatrist suggested getting this because I was complaining about my back from walking unevenly with the cast. It made a huge difference and is easy to slip on over your shoe.

Helpful Comment
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#### ★★★★★@ass@r3:12@eeueveve2003-BTM-KSC Document 1-2 Filed 10/18/18 PageID.44 Page 24 of 24

By Born2bBlue on June 28, 2018

Size: Large (Shoe Size: Men's 11 - 13 / Women's 11.5 - 13) Verified Purchase

Super product.

If you have an Air Cast and are doing the "duck waddle" when walking, this is the item you need. It fits snuggly to your shoe and has a two level system to adjust the height. It stays in place and does not slide or roll off. I've been in an aircast 4 weeks and it has performed perfectly. Recommended.

Helpful - Comment Report abuse

#### ★★★★★ Saving my knees and hips

By G. Reeder on March 4, 2018 Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

This thing is saving my knees and hips while I am in an air cast boot. It easily slips over my shoe to balance me perfectly and comfortably. It has a removable insole that you can use or not use depending on how much height you need. I love it and have been raving about it to everyone.

Helpful - Comment Report abuse

#### 🚖 🚖 🚖 🚖 ... an <mark>air cast</mark> for a few weeks after a bad ankle sprain

By shophappy on July 7, 2016 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

I was stuck in an air cast for a few weeks after a bad ankle sprain. Neither the orthopedic doctor nor the physical therapist said anything about the HORRIBLE unbalanced leg length this would create. I was afraid someone would mistake me for a zombie from TWD and I'd be shot while lurching down a dark street some night. So I took to Amazon and found this shoe balancer. Who cares that it makes you look even more special-needs-equipped? It works! I even went hiking with it on a level trail once my ankle started to heal. I highly recommend this.

Helpful V Comment Report abuse

#### 🚖 🚖 🚖 🏠 Level hips help reduce back and hip pain from modified walking gait due to an AirCast (moon) boot

By Jacqui M. on March 21, 2016 Size: Medium (Shoe Size: Men's 8.5 - 10.5 / Women's 9 - 11) Verified Purchase

A combination of this with gel insoles levelled up my hips reducing back pain when attempting to walk. It doesn't overcome the lack of movement in the booted ankle, nor the balance issues due to the boot's large flat sole.

This product is essentially a modified flip-flop; personally I didn't find the 2nd higher height offered useful. That second in-between sole was just too thick, so a thinner gel insole in my trainer brought me to the right height - I guess everyone needs to experiment to get the right height for your particular brand of air-cast (moon) boot. The rubber strapping around the trainer holds quite well, even if you've got a slightly smaller shoe than sizing specified. I should mention, one of the rub strapping bits has snapped, but lucky not one of the essential (thicker) sections - I imagine everyone needs to be careful not to over-stretch the rubber railing going around the trainer.

Regarding sizing - I purchased Medium - which was a bit big for my UK size 7 trainer, but it functioned okay anyway. I also forked out the extra cash for the fastest possible delivery to UK (from US), which worked very well.

Helpful 
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#### 

By Amma on November 4, 2017

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

Helped a great deal in leveling the hips when walking with air cast. I recently went on a trip to San Francisco, and with all of the walking up and down hills, this lift was invaluable. Easy to attach to any shoe. When I wore it over a black shoe, no one even noticed I had it on.

🕑 Helpful 🛛 🗸 Comment 🚽 Report abuse

★★★★☆ Awesome product helped me so much

By Martha Carrion on October 9, 2018

Size: Small (Shoe Size: Men's 6 - 8 / Women's 5 - 8.5) Verified Purchase

So glad I found this product. I have to wear an air cast, which throws off my balance. With this product I am able to walk more evenly, sparing my back. Thanks for the fast delivery, great product

Helpful Y Comment Report abuse

# **ClassAction.org**

This complaint is part of ClassAction.org's searchable class action lawsuit database and can be found in this post: <u>Consumers Unaware DJO Global Thick-Sole Walking Boot Can Cause Knee, Hip, Back Pain, Class Action Claims</u>