Dora Brodeur v. Energizer Battery Manufacturing Inc. (April 2, 2014)

STATE OF VERMONT
DEPARTMENT OF LABOR

Dora Brodeur

v.

Energizer Battery
Manufacturing, Inc.

Opinion No. 06-14WC

By: Phyllis Phillips, Esq.
Hearing Officer

For: Anne M. Noonan
Commissioner

State File No. AA-62208

OPINION AND ORDER

Hearing held in Montpelier, Vermont on November 22, 2013
Record closed on January 22, 2014

APPEARANCES:

Heidi Groff, Esq., for Claimant
John Valente, Esq., for Defendant

ISSUES PRESENTED:

Is SI joint fusion surgery, as recommended by Dr. Barnum, reasonable treatment causally related to Claimant's April 30, 2009 compensable work injury?

EXHIBITS:

Joint Exhibit I:	Medical records
Joint Exhibit II:	Medical records
Claimant's Exhibit 1:	*Curriculum vitae*, Michael Barnum, M.D.
Claimant's Exhibit 2:	Bibliography; White Paper (Oct. 2010); Rudolf, L., Sacroiliac Joint Arthrodesis – MIS Technique with Titanium Implants: Report of the First 50 Patients and Outcomes, *The Open Orthopaedics Journal* 2012; 6: 492-499.

CLAIM:

Medical benefits pursuant to 21 V.S.A. §640
Temporary total disability benefits retroactive to September 4, 2013 and ongoing, pursuant to 21 V.S.A. §642
Interest, costs and attorney fees pursuant to 21 V.S.A. §§664 and 678

FINDINGS OF FACT:

1. At all times relevant to these proceedings, Claimant was an employee and Defendant was her employer as those terms are defined in Vermont's Workers' Compensation Act.

2. Judicial notice is taken of all relevant forms and correspondence contained in the Department's file relating to this claim.

Claimant's 2009 Work Injury and Subsequent Treatment

3. On April 30, 2009 Claimant was moving metal trays of batteries from a conveyor belt onto interlocking shelves. Each tray weighed approximately 30 pounds. Claimant would lift a tray and then turn her body so that she could maneuver it through a narrow opening. At one point, as she was manipulating a tray she felt a pop, and then severe pain in her neck, shoulder and lower back. Claimant reported the injury to her supervisor later that day. The next day Defendant's nurse directed her to seek medical treatment.

4. Defendant accepted Claimant's injury, diagnosed as a lumbar, neck and shoulder strain, as compensable, and began paying workers' compensation benefits accordingly.

5. Initially Claimant treated conservatively for her injuries. Over time, her neck and shoulder complaints resolved, but her low back pain continued. An MRI in May 2009 revealed lumbar spine defects at both L4-5 and L5-S1. Claimant reported pain at these levels during an August 2009 evaluation with Dr. Landfish, an osteopath, and also exhibited point tenderness along the mid-right sacroiliac (SI) joint. This latter finding caused Dr. Landfish to suspect the SI joint as the pain generator, but a diagnostic injection failed to produce any relief of symptoms. Physical therapy was also unsuccessful.

6. In September 2009 Claimant underwent an evaluation with Dr. Barnum, a board certified orthopedic surgeon. Dr. Barnum advised against treatment directed at the SI joint, and instead recommended facet joint injections at both L4-5 and L5-S1 on the right. When neither these nor various other injections proved effective, Claimant was advised to consider surgical fusion.

7. In June 2010 Claimant underwent a two-level surgical fusion (L4-5 and L5-S1) with Dr. Ames, an orthopedic surgeon. Initially she recovered well. As she was anxious to return to work, Dr. Ames released her to do so only three months later, in early September 2010.

8. Unfortunately, by December 2010 Claimant's pain had returned. A June 2011 CT scan revealed a failed fusion – the bone grafts had not been incorporated and the surgical hardware had loosened. Revision surgery therefore became necessary.

9. Claimant underwent a second fusion surgery, again with Dr. Ames, in July 2011. As with her first fusion, initially she felt better. Though she complained of some left-sided low back pain in the area of her bone graft site, and also intermittent "pinching" over one or both of her SI joints, her pre-operative pain had largely resolved. She participated fully in a course of physical therapy from August through December 2011, then cancelled her remaining appointments, as she had been cleared to return to work and was "feeling good."

10. By March 2012 Claimant's pain had worsened again. She continued to experience "pinching" discomfort and pain across both sides of her lower back. A May 2012 CT scan showed that the fusion was healing, and subsequent x-rays confirmed that there was neither residual motion nor loosened hardware to account for her symptoms. Dr. Ames theorized that Claimant's pain was emanating from the site of her bone graft. Post-operative graft site pain can be significant and can last for years, with no "magic fix" readily available.

11. Presumably because Claimant's fusion appeared to be healing well, Dr. Ames did not believe that further surgery would be effective at alleviating her pain. Instead, she recommended chiropractic evaluation and/or physical therapy for SI joint mobilization and gluteal strengthening.

12. Claimant underwent chiropractic treatment with Dr. Keefe from June through October 2012. Although her pain levels fluctuated to some extent, for the most part Dr. Keefe's treatment, which focused primarily on chiropractic manipulation rather than core strengthening, did not result in any sustained improvement. Claimant continued to complain of pain and stiffness in her lumbar, sacral and hip regions.

13. Although Defendant was able for some time to accommodate Claimant's modified duty work restrictions, by February 2013 it was no longer able to do so. Claimant has not worked since.

Dr. Barnum's Proposed SI Joint Fusion Surgery

14. In November 2012 Claimant returned to Dr. Barnum for evaluation. As noted above, Finding of Fact No. 6 *supra*, Dr. Barnum previously had evaluated her in 2009, well prior to her first fusion surgery. At that time, he had advised against focusing treatment efforts on her SI joint, as he believed the lumbar facet joints were a more likely pain generator.

15. This time, Dr. Barnum concluded that Claimant's pain was in fact attributable to her SI joint. Initially, this was a diagnosis of exclusion – imaging scans showed that her fusion was solid, and also that there was no adjacent segment disease at L3-4, the disc level immediately above her fusion. Dr. Barnum thus eliminated Claimant's lumbar spine as the likely pain generator. I find this analysis credible.

16. There is no definitive test for SI joint dysfunction. However, once the lumbar spine has been ruled out as a likely pain source, there are physical findings that, if manifested, can form the basis for diagnosing the condition. In Claimant's case, Dr. Barnum made four such findings. Two findings consisted of pain elicited when the joint was maneuvered provocatively (the FABER and single leg stance tests) during clinical examinations in November 2012 and/or April 2013. A third positive finding consisted of tenderness to palpation over Claimant's left SI joint. These tests are all somewhat indicative of SI joint dysfunction, though none of them are conclusive.

17. Dr. Barnum's fourth positive finding, and the one he deemed most significant, was Claimant's positive response to an injection directly into her left SI joint. For a brief period – one or two hours – immediately following the injection, she reported a 95 percent reduction in pain. According to Dr. Barnum, this type of response is the "gold standard" for diagnosing SI joint dysfunction. In discussing the finding during his formal hearing testimony, he was extremely confident both that he had administered the injection properly into the joint and that the results established SI joint dysfunction as the pain generator. I find this testimony credible in all respects.

18. Having identified the source of Claimant's pain, as treatment Dr. Barnum recommended SI joint fusion surgery. In the past, such surgery required large incisions, significant bone harvesting, lengthy hospital stays and several months of non-weight-bearing recovery. More recently, a new surgical technique has been developed, using a different type of implant to fixate and then stabilize the joint. The procedure is minimally invasive, requiring only a small incision on the upper part of the buttock and a one-night hospital stay. After three weeks of partial weight bearing with crutches, the patient is released to full activity.

19. Dr. Barnum was one of the first surgeons in the country to become proficient in minimally invasive SI joint fusion surgery. He has performed approximately 120 such surgeries since 2009. Currently he is enrolled in a prospective study of one type of implant used, called the SI Lock device, which he helped design. The study is being funded by Globus Medical, the manufacturer. Of 13 patients enrolled so far, the outcomes have been excellent, with markedly decreased pain, increased function and successful return to work. In a published retrospective study of another manufacturer's device, Dr. Rudolf, the surgeon who trained Dr. Barnum in the technique, reported similarly positive outcomes some two years post-surgery.[1]

20. Dr. Barnum receives royalty payments from the sale of the SI Lock device for use in other patients. He is prohibited by law from receiving a royalty on any instrumentation he uses on his own patients. He also receives honoraria for conducting training seminars for other surgeons on the minimally invasive SI joint fusion technique, either from Globus Medical and/or from the manufacturer of the device involved in Dr. Rudolf's study.

[1] Rudolf, L., Sacroiliac Joint Arthrodesis – MIS Technique with Titanium Implants: Report of the First 50 Patients and Outcomes, *The Open Orthopaedics Journal* 2012; 6: 492-499. As disclosed in the article, Dr. Rudolf holds stock in, and is a consultant for, SI-Bone, Inc., the manufacturer of the implant used in the study.

21. As Dr. Barnum described in his testimony, SI joint dysfunction has been the "thorn in the side" of spine surgeons for many years. As was the case with Claimant, and as he himself has observed in his practice, patients who undergo lumbar fusions seem to get better for a time, but then return with nagging pain in their buttocks and down their legs. A soon-to-be-published research article documents a dramatic increase in the biomechanical stress to the SI joint following L4-5 and/or L5-S1 fusion surgery. With the minimally invasive SI fusion technique, a more viable surgical treatment option now exists for adjacent segment disease at this level.

22. Dr. Barnum expressed greater than 90 percent confidence that Claimant will do well with minimally invasive SI joint fusion. Without surgery, he does not expect long-lasting improvement, even with physical therapy. Dr. Barnum's surgical recommendation thus deviates from a 2010 "White Paper" algorithm for diagnosing and treating SI joint dysfunction, which counsels that a patient should undergo six to twelve weeks of active physical therapy, including stretching, strengthening, stabilization and balance, prior to considering surgical options. However, as stated in the paper itself, the algorithm "is meant to be a general guide for the clinician . . . and not an all-inclusive review of the science and literature that makes up each step." Given Dr. Barnum's extensive training and relevant experience, I find his decision not to adhere exactly to the algorithm's protocol in Claimant's case entirely credible and appropriate.

23. Dr. Barnum acknowledged that he did not review all of Claimant's medical records prior to concluding that she was an appropriate candidate for SI joint fusion surgery. Again, given his training and experience in treating SI joint dysfunction patients, and particularly his determination that additional physical therapy likely would not afford her sustainable relief, I do not consider his opinion any less credible as a result.

Dr. Binter's Expert Medical Opinion

24. Defendant's expert medical witness, Dr. Binter, strongly disagreed with Dr. Barnum's treatment approach. At Defendant's request, in May 2013 Dr. Binter reviewed Claimant's medical records and issued an opinion regarding the reasonableness of Dr. Barnum's proposed SI joint fusion surgery. Later, in July 2013 Dr. Binter conducted an independent medical examination of Claimant.

25. Dr. Binter is a board certified neurosurgeon with more than twenty years' experience. Over the course of her career, she performed roughly 4,000 elective spine surgeries, two-thirds of which were directed at the lumbar spine. She is well acquainted with SI joint issues in that context.

26. Dr. Binter has never recommended SI joint fusion to a patient, nor has she ever performed or observed the minimally invasive procedure that Dr. Barnum has recommended. In her clinical experience, SI joint problems can be managed very well conservatively, so long as the patient commits to strength training and core stabilization exercises.

27. In Dr. Binter's opinion, to a reasonable degree of medical certainty Claimant does not suffer from SI joint dysfunction. Of particular significance to her was the fact that Claimant had failed to localize her pain directly over the SI joint, either during her independent medical examination or later, when describing it in her deposition testimony. According to her research, this test for SI joint dysfunction, referred to in the medical literature as the "Fortin test," is a more reliable finding than merely eliciting pain upon palpation, as Dr. Barnum had reported.

28. Dr. Binter characterized Dr. Barnum's surgical recommendation as having been based solely on Claimant's response to a single SI joint injection, an analysis with which she strenuously disagreed. In her opinion, a patient should demonstrate at least three positive signs of SI joint dysfunction in order to increase the probability of an accurate diagnosis. When questioned on cross examination, she acknowledged that in fact Dr. Barnum had made more than three such findings, though he may not have clearly reported all of them at the time.

29. In Dr. Binter's opinion, Claimant's ongoing pain is most likely attributable to a combination of general deconditioning and "pretty typical" post-fusion and post-graft site pain. Consistent with the treatment approach to which she adhered over the years with her own patients, she recommended that Claimant return to physical therapy for a strength training refresher course, then restart her home exercise program with a pool and gym membership and an emphasis on core strengthening.

30. Having rejected SI joint surgery as a reasonable treatment option, in Dr. Binter's opinion Claimant had reached an end medical result, with a 23 percent whole person permanent impairment attributable to her work injury. With this opinion as support, the Department approved Defendant's discontinuance of temporary total disability benefits effective September 4, 2013.

31. In accordance with Dr. Binter's treatment recommendation, between late September and mid-November 2013 Claimant engaged in another course of physical therapy. In all, she underwent 19 sessions, seven of which were aqua- rather than land-based. She also used a pool membership to perform aqua-based exercises on her own on a twice-weekly basis. Unfortunately, her pain never significantly improved and instead worsened, to the point where the therapist recommended discontinuing land therapy altogether and focusing solely on pool work.

32. It is unclear to what extent Claimant's most recent course of physical therapy consisted of core strengthening, as Dr. Binter had suggested. And despite the fact that the program has worsened rather than alleviated her pain, in her formal hearing testimony Dr. Binter held firm to her assertion that Claimant's pain is best managed conservatively rather than surgically. In her opinion, committing to a good exercise program is a lifestyle, one that Claimant should maintain even though she likely will continue to suffer from low back pain nevertheless. While this may be true, I find that Claimant's inability to participate fully in structured physical therapy is an indication that Dr. Binter's approach probably will not succeed at effectively managing her pain.

Claimant's Current Status

33. In her formal hearing testimony, Claimant credibly described her current condition. She has exhibited a pattern of worsening pain and decreased function essentially since the spring of 2012. Her sleep is disrupted by pain. She has at times sought emergency room treatment for her symptoms. She continues to adhere to a home exercise program involving daily stretching, but described herself as "not doing well lately." She is "deathly afraid" of a third surgery, but is willing to undergo it because "I just want my life back."

CONCLUSIONS OF LAW:

1. In workers' compensation cases, the claimant has the burden of establishing all facts essential to the rights asserted. *King v. Snide*, 144 Vt. 395, 399 (1984). He or she must establish by sufficient credible evidence the character and extent of the injury as well as the causal connection between the injury and the employment. *Egbert v. The Book Press*, 144 Vt. 367 (1984). There must be created in the mind of the trier of fact something more than a possibility, suspicion or surmise that the incidents complained of were the cause of the injury and the resulting disability, and the inference from the facts proved must be the more probable hypothesis. *Burton v. Holden Lumber Co.*, 112 Vt. 17 (1941); *Morse v. John E. Russell Corp.*, Opinion No. 40-92WC (May 7, 1993).

2. Vermont's workers' compensation statute obligates an employer to pay only for those medical treatments that are determined to be both "reasonable" and causally related to the compensable injury. 21 V.S.A. §640(a); *MacAskill v. Kelly Services*, Opinion No. 04-09WC (January 30, 2009). The commissioner has discretion to determine what constitutes "reasonable" medical treatment given the particular circumstances of each case. *Id.* A treatment can be unreasonable either because it is not medically necessary or because it is not related to the compensable injury. *Baraw v. F.R. Lafayette, Inc.*, Opinion No. 01-10WC (January 20, 2010).

3. The disputed issue in this case is whether Dr. Barnum's proposed SI joint fusion surgery constitutes reasonable medical treatment for Claimant's April 2009 work injury. The parties offered conflicting expert testimony on the question. In such cases, the commissioner traditionally uses a five-part test to determine which expert's opinion is the most persuasive: (1) the nature of treatment and the length of time there has been a patient-provider relationship; (2) whether the expert examined all pertinent records; (3) the clarity, thoroughness and objective support underlying the opinion; (4) the comprehensiveness of the evaluation; and (5) the qualifications of the experts, including training and experience. *Geiger v. Hawk Mountain Inn*, Opinion No. 37-03WC (September 17, 2003).

4. With particular focus on Dr. Barnum's qualifications, I conclude that his opinion is the most persuasive. Dr. Barnum has extensive training, expertise and experience in diagnosing and surgically treating patients who suffer from SI joint dysfunction. His diagnosis in Claimant's case was appropriately based on both his clinical findings and on Claimant's response to a "gold standard" diagnostic injection. As for treatment, the extent to which the minimally invasive technique he proposes to employ differs from the way SI joint fusion surgery was accomplished in the past is striking. The results he has reported within his own patient population are credible and compelling, and the fact that his current research is funded by the manufacturer of an implant that he helped design does not diminish his proven success rate. I conclude that the confidence he has expressed both in his diagnosis and in his ability to provide effective surgical relief is well-placed.

5. Though an experienced surgeon in her own right, Dr. Binter lacks the specific training and expertise that Dr. Barnum displayed with respect to diagnosing and surgically treating SI joint dysfunction. Her conclusion that Claimant did not suffer from the condition was based at least in part on her assertion that Dr. Barnum had not made sufficient clinical findings to support the diagnosis, a claim that I have found to be unsupported by the record. As for her recommendation that Claimant continue to manage her symptoms conservatively by re-engaging in physical therapy, this already has proven ineffective. For these reasons, I conclude that her opinions as to both diagnosis and treatment are unpersuasive.

6. The determination whether a treatment is reasonable must be based primarily on evidence establishing the likelihood that it will improve the patient's condition, either by relieving symptoms and/or by maintaining or increasing functional abilities. *Quinn v. Emery Worldwide*, Opinion No. 29-00WC (September 11, 2000). An injured worker's subjective preferences cannot render a medically unreasonable treatment reasonable. *See, Britton v. Laidlaw Transit,* Opinion No. 47-03WC (December 3, 2003). As is the case with many aspects of medical decision-making, however, there can be more than one right answer, and thus more than one reasonable treatment option for any given condition. *Cahill v. Benchmark Assisted Living*, Opinion No. 13-12WC (April 27, 2013); *Lackey v. Brattleboro Retreat*, Opinion No. 15-10WC (April 21, 2010). And although the workers' compensation statute mandates that employers pay only for "reasonable" medical treatment, it does not in any way require that injured workers thereby forfeit the right to direct their own medical care. *Id.*; *see also, Luce v. Town of Stowe*, Opinion No. 27-13WC (December 11, 2013).

7. The experts here have offered two vastly different treatment approaches. Dr. Barnum's surgical option carries greater risk, but potentially far more significant benefit. Dr. Binter's conservative management recommendation offers less risk, but most likely less reward as well. There is sufficient evidence from which to conclude that either approach would be a reasonable treatment option. That being the case, the choice is Claimant's to make, not mine.

8. I conclude that Claimant has sustained her burden of proving that minimally invasive SI joint fusion surgery constitutes reasonable medical treatment for her compensable work-related injury. Under 21 V.S.A. §640, Defendant is therefore obligated to pay for it.

9. Having concluded that Dr. Barnum's proposed surgery is reasonable, it follows that Dr. Binter's end medical result determination was premature. I therefore conclude that Claimant is entitled to temporary total disability benefits retroactive to the date of discontinuance, September 4, 2013, and ongoing until properly discontinued in accordance with 21 V.S.A. §643a and Workers' Compensation Rule 18.0000.

10. As Claimant has prevailed on her claim for benefits, she is entitled to an award of costs and attorney fees. In accordance with 21 V.S.A. §678(e), Claimant shall have 30 days from the date of this opinion within which to submit her itemized claim.

ORDER:

Based on the foregoing findings of fact and conclusions of law, Defendant is hereby **ORDERED** to pay:

1. Temporary total disability benefits retroactive to September 4, 2013 and ongoing, in accordance with 21 V.S.A. §642, with interest on any unpaid amounts calculated in accordance with 21 V.S.A. §664;

2. Medical benefits covering all reasonable medical services and supplies associated with minimally invasive SI joint fusion surgery as proposed by Dr. Barnum, in accordance with 21 V.S.A. §640; and

3. Costs and attorney fees in amounts to be determined, in accordance with 21 V.S.A. §678.

DATED at Montpelier, Vermont this 2nd day of April 2014.

_____
Anne M. Noonan
Commissioner

Appeal:

Within 30 days after copies of this opinion have been mailed, either party may appeal questions of fact or mixed questions of law and fact to a superior court or questions of law to the Vermont Supreme Court. 21 V.S.A. §§670, 672.