

moving in the right direction

Mechanical Diagnosis And Therapy™
of the spine and extremities

»» McKenzie Conferences- Should I or Shouldn't I?

Michelle Spross, PT, Dip. MDT

With this year's MDT Conference of the Americas in Baltimore right around the corner, you may be asking the question, "Why should I attend a McKenzie Conference?" Well, as I have told colleagues and Diploma residents over the years, whether you are already MDT certified or taking the MDT courses, if you are not attending the conferences, you are missing out.

There are many reasons to attend a McKenzie conference. Consistently, year after year, conference participants have stated that conference networking is invaluable. Although it's great taking time off work and sight-seeing in beautiful locations like Rio de Janeiro, Orlando, and Montreal; hanging out poolside is not what I am referring to. The fact is that therapy is ever changing. Conferences are a great way to check in with other clinicians that are treating patients the way you do.

In-depth discussion and solutions have come out of conferences such as, how does your clinic bill for the REPEX? How do you document goals on a lumbar extension dysfunction? How do you talk to an insurance company who authorizes you to see a patient three times a week for three weeks and discharge them, when you really need one visit every week or two for eight to ten weeks to remodel their contractile dysfunction? Or you have a patient that you think has a derangement, but you're stuck on how to reduce it? As a collective group, we are learning and evolving. After the 2008 conference, a conversation with a few of my peers led to looking at horizontal planes +/- internal and external rotation to resolve shoulder derangements; since that time, I am reducing shoulder derangements that require directional preferences I did not previously investigate. Additionally, networking is a great way to meet people that can be future resources.

The workshop rotation is another big reason to attend this year's Baltimore conference. Workshops are one of the exciting differences between the MDT Conferences of the Americas and the International conferences. Dividing into smaller groups and participating with faculty to problem-solve topics such as, treatment for the mechanically inconclusive patient or differentiating nerve root entrapments vs. joint derangements vs. adherent nerve roots, is valuable. I always gain at least a gem or two in each workshop to take with me to use immediately on Monday. Following the vestibular workshop in Orlando 2008, when a patient complains of dizziness, I now feel much more confident differentiating between Benign Paroxysmal Positional Vertigo (BPPV) and cervical joint derangements.

Diplomates - *listen up!* The 2010 McKenzie MDT conference takes workshops to the next level based on feedback you provided. Conference attendees will continue to be divided into groups to rotate through four workshops to insure that each attendee does not miss any vital topics. However, this year, a series of workshops have been specifically designed for Diplomates. We have taken the topics of biggest concern for our Diplomate level clinicians and developed four distinctly advanced workshops.

In addition, you will have an opportunity to interact with the Institute's educational leaders, Helen Clare, Dan Kelley and Kathy Hoyt. The Diplomate workshops have a max of 40 participants, so do not wait to sign up.

The standard workshops for all other attendees are equally exciting. These four workshops are designed to address the topics currently facing McKenzie clinicians and will be run by a group of McKenzie faculty. They have been developed from a variety of sources including feedback from courses, most common mistakes of clinicians entering into the Diploma program and the latest orthopedic research.

In addition to the workshops and networking, the conferences have knowledgeable speakers presenting the latest in research. I do not know about you guys, but I have a growing pile of articles and journals in a corner of my office that I am forever trying to keep up with. Conferences are a great way to sit back and listen to the newest in pertinent information in the world of orthopedics. Speakers are chosen to demonstrate a variety of viewpoints and with highly interactive panel discussions, I have witnessed some pretty interesting fireworks at past conferences! I also walk away with a better understanding of research to cite to my referring physicians as well as to educate my patients.

The 2008 conference had such an overwhelmingly positive response from the pre-conference workshop about Medicare audits and documentation that we have invited Steve Levine back, along with his colleague Helene Fearon to discuss in depth coding, documentation and compliance information. Whether you are in private practice, do your own billing and coding or not, or if the idea of a Medicare audit makes you break out in a cold sweat, this is one seminar you need to attend.

Finally, if getting CEUs in something other than the hour lunch in-service given by your hospital's infection control representative appeals to you, or if you would like to learn useful research and enhanced clinical skills that you can actually use on Monday, sign up now for the MDT Conference of the Americas in Baltimore this August. I look forward to seeing you all there for a highly stimulating learning experience – and after the conference, you can join me poolside! ■

In This Issue:

- Feature Commentary
- Clinical Tips
- Case Study
- Business Corner

"Conferences are a great way to check in with other clinicians that are treating patients the way you do."

2010 MDT Conference of the Americas

"Striving For Clinical Excellence
in an Era of Evidence Based Medicine"

August 6-8, 2010

Renaissance Harborplace Hotel, Baltimore, MD

Full program details and registration

<http://www.mckenziemdt.org/conf2010.cfm>



Baltimore

Don't miss the early bird registration deadline 5/1/2010

History in the Making

Kim Greene, PT, Dip. MDT

It's Friday afternoon and your last patient has arrived. The week has dragged on like a long distance relationship and you are begging for a simple anterior derangement so that you can make it to happy hour with your friends. Your patient, Mr. X, is a 69 year old male who complains of lumbar pain radiating into his leg. He has a rather involved health history with cardiac arrhythmia, Type II diabetes, and recent diagnoses of stenosis. You have hopes of a 30 min. evaluation, but now it seems impossible. Are his leg symptoms referred from his lumbar spine? What questions would help you sort it out? What questions would keep you there until Monday? Before you can properly classify a patient, it is essential that you take an efficient history. But few PTs have that skill without extensive practice.

I have been a MDT Clinical Mentor for three years and truly enjoy watching students transform as they ascend to Diploma level. Taking an exceptional history is something that takes practice and skill. During the diploma program, we emphasize the importance of determining classification on day 1. The history should be a friendly, non-threatening conversation which guides the examination. The question on the table is always "can we really help this person or do they need to be referred back to the physician?"

The MDT forms are divided in four segments: classification, lesion behavior, past history and red flags. The first step in classifying a patient is to establish the location of symptoms. This is most accurately attained by using an intake

THE MCKENZIE INSTITUTE
LUMBAR SPINE ASSESSMENT

Date: _____
Name: _____ Sex: M / F
Address: _____
Telephone: _____
Date of Birth: _____ Age: _____
Referral: GP / Orth / Self / Other
Work: Mechanical Stresses: _____
Lifestyle: Mechanical Stresses: _____
Functional Disability from present episode: _____
Functional Disability score: _____
VAS Score (0-10): _____

HISTORY

Present Symptoms: _____
Present since: _____
Commented on a sudden: _____
Symptoms at onset: back / thigh / leg
Constant symptoms: back / thigh / leg
Intermittent symptoms: back / thigh / leg
Worse: sitting / rising / walking / on the stairs / on the phone / on the move
Better: sitting / rising / walking / on the stairs / on the phone / on the move
Disturbed Sleep: Yes / No
Previous Episodes: 0 1-5 6-10 11+ Year of first episode: _____
Previous History: _____
Previous Treatments: _____

SPECIFIC QUESTIONS

Cough / Sneeze / Strain / Valsalva / Bowel normal / abnormal / Const: normal / abnormal
Medications: GI / NSAIDs / Anti / Steroids / Antibiotics / Other: _____
General Health: Good / Fair / Poor
Smoking: Yes / No
Recent Urinary Infection: Yes / No
Recent High Velocity Trauma: Yes / No
Accidents: Yes / No
Lifted and weights loss: Yes / No
Other: _____

McKenzie Institute International 2003

questionnaire and verbal confirmation on the body diagram. Then you must record the present symptoms the patient has experienced the last 24-48 hours. Students often get confused with the body diagram and present symptoms, assuming they are one in the same. But they are not. Understanding the difference is important to determine the status of the patient's condition. Once you establish the location of symptoms using the body diagram, the two most crucial questions are: (1) how long have you had your symptoms? and (2) are your symptoms constant or intermittent? If you can't get these two questions answered, a provisional classification becomes difficult to attain. The improving/unchanging/worsening section supports classification and provides guidance to the amount of force to be used during the examination

process. Remember, this is the therapist's assessment of the patient rather than the patient's response. For example, if Mr. X feels he is improving, but he reports 27 falls in the past week, you should circle "worsening" on the form.

The better/worse section gives guidance to lesion behavior by providing clues to both direction and load. Asking meaningful questions with appropriate follow-up questions is essential for this section of the history. To do so effectively, you must remove your "treating therapist" crown and seek to gain information. You must let the patient talk and truly listen to their answers. Students often ask leading questions to which the patient will agree, giving the better/worse section a derangement-bias. Let's return to Mr. X. Examples of leading questions are: "Does sitting make you worse?" "Do you have pain with rising?" "Does your wife contribute to your back pain?" These questions presume causation of the patient's symptoms, and can lead to inaccurate information. Instead, ask unbiased questions, such as "what happens to your leg pain with walking?" If the patient replies that his leg hurts more with walking, a good follow-up question is "after walking, what effect does sitting have on your leg pain?" Open-ended questions are more effective than closed-ended questions for this portion of the history. The most distal symptom must be explored in the better/worse section and well documented on the form. Many students still struggle with this concept, but in Mr. X's case, the behavior of the leg symptoms is crucial to differentiating derangement from stenosis.

The next section of the form relates to past history and previous treatments. By this point in the history, a provisional classification should be determined. Past history provides insight to prognosis. If the patient describes a longstanding episodic history, then the lesion will often require time to resolve or may not fully resolve. This is especially true if the episodes are increasing in duration and intensity. Students often overlook the time component and expect quick resolution when the history suggests otherwise. Inquiring about previous treatments is necessary with some patients and can add confusion with others. For example, knowing the effect of oral steroids is essential information if the history suggests an inflammatory process; whereas, inquiring about previous treatment for a patient in chronic pain sometimes provides no additional information. Being able to identify meaningful questions requires active listening, a skill that gets overlooked with a derangement bias. In addition, the therapist must be able to read the patient's non-verbal communication and address any immediate concerns throughout any portion of the history. Active listening and establishing rapport are essential to gain your patient's trust, effectively communicate your treatment plan, and gain confidence in the treatment provided. If you accurately classify, but the patient does not buy in, chances of providing successful treatment decrease.

Lastly, the red flag section provides information on sinister pathology. Most students do well with this area and can accurately explain each question on the form. Nonetheless, some students struggle with aggressively examining patients with diagnoses such as osteoporosis or post-surgery. Others get apprehensive due to the results of the imaging studies. These can lead to a fear of moving the patient. But if you're applying MDT properly, the tissue will provide answers to all your questions including the most critical question on the table: "Is this patient appropriate for physical therapy?" Ultimately, the history form gives valuable insight to this question, and leads to a more productive and effective examination. It is a pleasure to see these areas often markedly improved over the nine week diploma residency. ■

Next Issue: Applying the History to the Examination

"Every patient contains a truth... The (clinician) must adopt a conscious humility, not towards the patient, but towards the truth concealed within the patient" (Cyriax (1982). *Textbook of Orthopaedic Medicine*, Vol. 1, pg. 45)

▶▶ Mechanical evaluation & treatment of irreducible derangement/entrapment: A case report

Susan McGinnis, PT, Cert. MDT and Brian Sorensen, PT, Cert. MDT

PATIENT PRESENTATION

A 31 year old male presented with unilateral symptoms below the knee that have been present and unchanging since April 2008. The symptoms are intermittent in nature. The patient describes onset secondary to chiropractic manipulation. Prior to 2008, patient denies any past history of back pain. The patient had discectomies in 2008 and 2009. His symptoms are worse in the morning and when still. Standing, walking and coughing aggravate his symptoms. Symptoms are often better as the day progresses and relieved with sitting and walking short distances. Patient reports having very good health.

INITIAL EVALUATION: 2/10/10

Please refer to the completed assessment form.*

DAY 2: 2/16/10

The patient reported that he has been moving easier and the "stretch" feels good (RFIL). Improved walking tolerance. Standing symptoms are 2/10 (0-10 VAS – scale) left posterior thigh. He continues to have moderate loss of FIS that produces calf and increases thigh – NW. Moderate loss of EIS produces back – NW. RFIL – NE. RFIS increased thigh and produce calf with increased ROM. Within five minutes after performing the ROM returns to baseline of moderate loss.

Home exercise program was progressed to RFISit, 10-15 rep every two hours.

DAY 3: 2/23/10

Patient reported that his ability to walk continues to improve. Standing symptoms are 1/10.

Minimal movement loss with FIS produced calf, increased thigh – NW. Moderate loss of EIS and produced back pain – NW. Progressed exercises to FISit with knees partially extended.

DAY 4: 3/2/10

Patient is now able to walk ¾ of a mile before the symptoms make him stop. FIS approaching nil movement loss (can now touch fingertips to floor). Standing symptomatic baseline is 0/10.

Moderate loss of EIS and produced back pain – NW
RFISit with knees extended produced calf and thigh – NW.
Progressed exercises to FISit with knees in full extension
Follow up visit in three weeks.

DISCUSSION

This case supports the importance of listening to the patient's history for insight to classification. He had been referred by a credentialed therapist who had recently given him lateral techniques that resulted in a decrease

in his symptoms. Unfortunately, the improvement did not last. Extension exercises clearly "bothered my leg each time," giving guidance to the examination.

In order to rule out a reducible derangement, flexion had to be assessed on Day 1. When no change occurred with flexion principle, the diagnosis of irreducible derangement /entrapment was made for following reasons:

1. NE/NW with repeated flexion
2. Moderate loss of Extension
3. Temporary improvement ROM with flexion
4. History of no improvement with lateral/extension principle.

This patient doesn't truly fit the textbook definition of entrapment because the symptoms are intermittent, but, there is more evidence to support entrapment than any other classification. What is the prognosis for this patient with an irreducible derangement/entrapment? Good, as the patient described improved walking tolerance on the second visit and consecutive visits. Most entrapments have a fair to poor prognosis, and patients won't report any improvement for 2-3 weeks. In this case, however, the patient responded quicker than expected.

Editor's Comments on Case Study

Some clinicians may question why this patient was classified as an entrapment rather than a derangement responding to flexion; especially with an improvement in ROM. Here are four key differences between the two:

1. • Derangement: Episodic History
• Entrapment: History unchanging for two years; symptoms unchanging with extension/lateral principle
2. • Derangement: the leg symptoms will decrease or abolish with repeated flexion
• Entrapment: thigh and leg symptoms increased with repeated flexion
3. • Derangement: leg symptoms abolished over a three week period.
• Entrapment: Leg/thigh symptoms decreased over time, but no immediate change during initial visit or successive follow-up visits.
4. • Derangement: ROM will remain better over time
• Entrapment: ROM with temporary increase; returns within minutes of walking.
(McKenzie and May. The Lumbar Spine: MDT (2003), pg. 639). ■

*The completed assessment form for this case study is posted in the MDT Resource Center at www.mckenziemdt.org/resource.cfm.



McKenzie
INSTITUTE
AMERICAS REGION®

McKenzie Case Manager



For those of you preparing for the Credentialing Exam, the online McKenzie Case Manager course is a great resource to jump-start the process. This advanced course is a dynamic, web-based experience that incorporates eight real-life patient case studies, helping you focus on the power of utilizing the information gathered on the MDT assessment form to aid in the clinical reasoning process.

For more information or to register, visit: www.mckenziemdt.org/eduCourseCM.cfm

►► Communicating with your colleagues: How do you translate MDT?

Susan Bamberger, PT, Dip. MDT

One of the biggest challenges MDT practitioners face is working with colleagues who do not understand the big deal about MDT. Most of us learning MDT do not have the benefit of working with people who are trained in MDT, so it can be frustrating to go back to your clinic and face your peers, who do things differently.

You've heard all the questions before: "What's so complicated about extending people" and "What do you do when extension makes them worse". Or perhaps you have been accused of being a "McKenzie Zealot", or you hear the comment "yeah, I do McKenzie, but it doesn't work for everyone." While we all try to explain the Method, it is not uncommon for our explanations to fall on deaf ears.

So here are some tips to help convince your colleagues about the value of MDT:

- Explain that McKenzie/MDT is not extension, rather it is about directional preference and classification. Answering the two questions above will give you the answer as to appropriateness for physical therapy. This makes the approach extremely powerful.

Extending people is not difficult, but knowing which direction to move them and under what load and conditions to make a positive lasting effect is deceptively complicated.

If you extend someone and it makes them worse, then you have the information to change the direction, load or repetitions to design an effective program. Using patient generated forces, listening for symptom response to movement and looking for mechanical changes will give you the information needed to make an effective decision.

- McKenzie/MDT is a comprehensive assessment process. Making solid treatment choices based on the assessment is responsible, not overzealous.
- Once you understand the principles of MDT, including patient generated forces, self treatment and patient empowerment, these principles can be applied to any patient you see.

Aside from having direct discussions, here are some additional things you can do to educate your colleagues:

- Be honestly curious. If you work with a therapist who has their OCS, ask them how they would treat right-sided localized back pain that is worse with sitting and better with walking. Walk through a case study with them and ask them to explain their logic. Then explain the logic of what you are doing and why you are choosing to start with patient generated forces.
- Attend local Orthopedic study groups. Listen to the topics, and try to understand how to "translate" what you are doing to what they are doing. If they are discussing a difficult patient, offer your perspective. Know the literature to support what you are discussing. Using statistics to support your view gives strength to your statement; especially in a professional setting.

- Ask for help with the tough ones. Then probe them of the logic of their advice. If they want to stabilize, what is the outcome they are looking for? What measures are they using to determine effectiveness of the intervention? Explain how you use baselines to measure progress.
- Share your patients: pick a colleague, and put a few patients on their schedule that are ready for return to function. Or, make sure to treat patients in the gym, so your colleagues can observe. Your patients can be your best advocate. And if you have done your job right, the patient can articulate the principles of self-management to the therapist. Alternate treatments - you take the patient for one treatment, and then they take them for the next. Eventually they will see the consistent results that should spark their attention.
- If you take over for another therapist, don't be afraid to look through MDT glasses. You are a licensed practitioner, and that patient's care is in your hands for that day. Don't try to duplicate their treatment. For example, you fill in for an ill therapist one day and your first patient is a knee patient. The plan calls for some manual therapy and TherEx. The patient reports after six visits they are 20% better. After some questioning and assessing, you find a knee derangement that abolishes with knee extension. You can use the rest of the prescribed treatment to test the stability of the reduction. If an exercise re-deranges the knee, document this and return the patient to the reducing exercise. The patient will better understand cause and effect, and will likely buy in to working with the reducing exercise in between sessions.

Remember, MDT is predominantly an assessment process. As such, it is not a tool, it is the toolbox, and is designed to work as a clinical reasoning approach to determine classification and an appropriate treatment plan. Here are some other things to remember:

- Don't be overzealous and don't get defensive. I have never met physical therapists more passionate than MDT practitioners, but this does not always work to our advantage.
- All good, experienced therapists usually come to the same conclusion, as we have all seen the same types of trends in our patients. However, people take different paths to get there. MDT is just one of the paths.
- Actions speak louder than words - discuss a case study, offer to let someone observe you. It will often take more than one conversation to convince someone. And remember, just because you have explained what MDT does a thousand times, it does not mean they have heard it a thousand times, or even enough times to comprehend what you are saying. ■

Next issue: Translating MDT to your patients



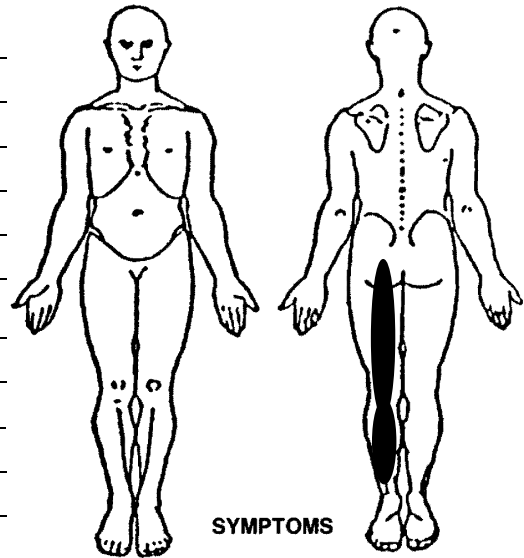
Special Online feature... Madhavi Kulkarni, PT, Dip. MDT explains about an effective way to translate MDT from her recent attendance at The Oregon Physical Therapy Association annual conference and their exciting presentation, *Grand Rounds: MDT, NAIOMT, and Kaiser/Maitland (Australian) - Comparing Experts in Low Back Pain*. www.mckenziemdt.org/newsletter/

Read Today...Discuss Tomorrow! Share more of your ideas on effective communication with the online MDT Study Group - <http://health.groups.yahoo.com/group/McKenzieStudy/>



THE MCKENZIE INSTITUTE LUMBAR SPINE ASSESSMENT

Date 2/10/10
 Name Fred Sex M / F
 Address _____
 Telephone _____
 Date of Birth 6/1/78 Age 31
 Referral: GP / Orth / Self / Other _____
 Work: Mechanical Stresses Varies between Sit, Walking, and Lifting
Unable to work out at gym
 Leisure: Mechanical Stresses Owns Small Business
 Functional Disability from present episode Decreased Standing, walking, lifting daughter
 VAS Score (0-10) 4/10



HISTORY

Present Symptoms Left Buttock, thigh and calf
 Present since April 2008 Improving Unchanging Worsening
 Commenced as a result of ?? Chiro Manip Or no apparent reason
 Symptoms at onset: back / thigh / leg
 Constant symptoms: back / thigh / leg Intermittent symptoms: back / thigh / leg
 Worse bending Sitting / rising standing walking lying
am / as the day progresses / pm when still / on the move
 other _____
 Better bending sitting standing walking lying
am / as the day progresses / pm when still / on the move
 other _____
 Disturbed Sleep Yes / No Sleeping postures: prone / sup / side R / L Surface: firm / soft / sag
 Previous Episodes 0 1-5 6-10 11+ Year of first episode _____
 Previous History Chiropractor Treatment 1X 2008

Previous Treatments Physical Therapy – 10 visits Nov – Dec 2009: Lateral/extension principle Without Lasting Change;

12 visits of stabilization (non-MDT) after surgery Oct 09: No Effect

SPECIFIC QUESTIONS

Cough / Sneeze / Strain +ve / -ve Bladder normal / abnormal Gait: normal / abnormal
 Medications: Nil / NSAIDS / Analg / Steroids / Anticoag / Other Vicodin PRN
 General Health: Good / Fair / Poor _____
 Imaging: Yes / No _____
 Recent or major surgery: Yes / No Discectomy 6/08 and 10/09 Night Pain: Yes No
 Accidents: Yes No Unexplained weight loss: Yes / No
 Other: _____

EXAMINATION

POSTURE

Sitting: Good / Fair / **Poor** Standing: Good / Fair / Poor Lordosis: Red / Acc / **Normal** Lateral Shift: Right / Left / Nil
 Correction of Posture: Better / Worse / No effect Relevant: Yes / No
 Other Observations: _____

NEUROLOGICAL

Motor Deficit _____ Reflexes _____
 Sensory Deficit _____ Dural Signs **+ SLR**

MOVEMENT LOSS

	Maj	Mod	Min	Nil	Pain
Flexion		✓			+ (Left Deviation)
Extension		✓			+
Side Gliding R			✓		
Side Gliding L			✓		

TEST MOVEMENTS Describe effect on present pain – **During:** produces, abolishes, increases, decreases, no effect, centralising, peripheralising. **After:** better, worse, no better, no worse, no effect, centralised, peripheralised.

	Symptoms During Testing	Symptoms After Testing	Mechanical Response		
			↑Rom	↓Rom	No Effect
Pretest symptoms standing: 4/10 Left buttock and thigh					
FIS	↑				
Rep FIS	↑ buttock thigh, prod calf, NW	↑↑ Flex ROM			
EIS	↑				
Rep EIS	↑	NW			
Pretest symptoms lying: Lying Ø , Sit Ø					
FIL	NE				
Rep FIL	NE	↑ FIS ROM			
EIL	RFISit : NE	NE			
Rep EIL					
If required pretest symptoms:					
SGIS – R					
Rep SGIS - R					
SGIS - L					
Rep SGIS- L					

STATIC TESTS

Sitting slouched _____ Sitting erect _____
 Standing slouched _____ Standing erect _____
 Lying prone in extension _____ Long sitting _____

OTHER TESTS

PROVISIONAL CLASSIFICATION:

Derangement : Irreducible/ Entrapment Dysfunction _____ Posture _____ Other _____
 Derangement: Pain location Unilateral below knee

PRINCIPLE OF MANAGEMENT

Prod Leg NW is ok, should not remain present greater than 20 minutes
 Education _____ Equipment Provided _____
 Mechanical Therapy: Yes / No _____
 Extension Principle: _____ Lateral Principle: _____
 Flexion Principle: RFIL 10 X every 2 hrs. Other: Warning about worsening peripheral symptoms
 Treatment Goals: Increase ability to walk and stand; return to regular work activities including lifting; return to regular gym routine.