

clinical conduit



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2006 Schedule

Cervical Course

Mar 18-19 Athens, GA

Pilates Course

Feb 11-12 Grapevine, TX
May 20-21 Chicago, IL

Shoulder Course

Feb 18-19 Oklahoma City
Mar 4-5 Salina, KS
Mar 11-12 Grapevine, TX
Apr 1-2 Chicago, IL

Knee Course

Apr 22-23 Lawton, OK
Jun 10-11 Grapevine, Tx
Jun 24-25 Chicago, IL

Lumbopelvic Course

Apr 29-30 Plano, TX

The remaining schedule for 2006 (July - November) is available at our web site — www.continuing.ed.cc and will also be published in upcoming newsletter issues.

Do we have the knowledge for direct access practice?



The APTA's goal for physical therapy practice states that by 2020 physical therapy will be provided by clinicians who are doctors of physical therapy and recognized by consumers and other health care professionals as the practitioners of choice for rehabilitation needs. This would include direct access to physical therapists by consumers for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.

To realize this vision we must demonstrate the requisite knowledge necessary to handle such a responsibility. A very interesting study was recently published in BMC Musculoskeletal Disorders that may offer some insight into our readiness to assume this responsibility. The study describes physical therapists' knowledge in managing musculoskeletal conditions and contrasts it to medical students, interns, residents, and physician specialists.

A full free text reprint of the article can be accessed at <http://www.biomedcentral.com/1471-2474/6/32>

The study randomly asked about 175 physical therapist students (from 12 different schools across the country) and experienced physical therapists (from the armed services) to complete a standardized examination assessing knowledge in managing musculoskeletal conditions.

This examination has been used in previous studies to evaluate knowledge in a variety of medical specialties including students, physician interns and residents, and a variety of practicing medical specialists.

The results were quite interesting and spoke favorably about the preparatory and practicing knowledge of physical therapists. Experienced physical therapists had higher levels of knowledge in managing musculoskeletal conditions than medical students, physician interns and residents, and all physician specialists with the exception of orthopedists. PT students enrolled in doctoral degree programs achieved higher scores than their peers enrolled in entry-level master's programs. In addition, experienced PTs who were board-certified in orthopedics or sports physical therapy achieved higher scores than their non-board certified colleagues.

- continued on page 2

Contrasting two methods of managing a hamstring strain

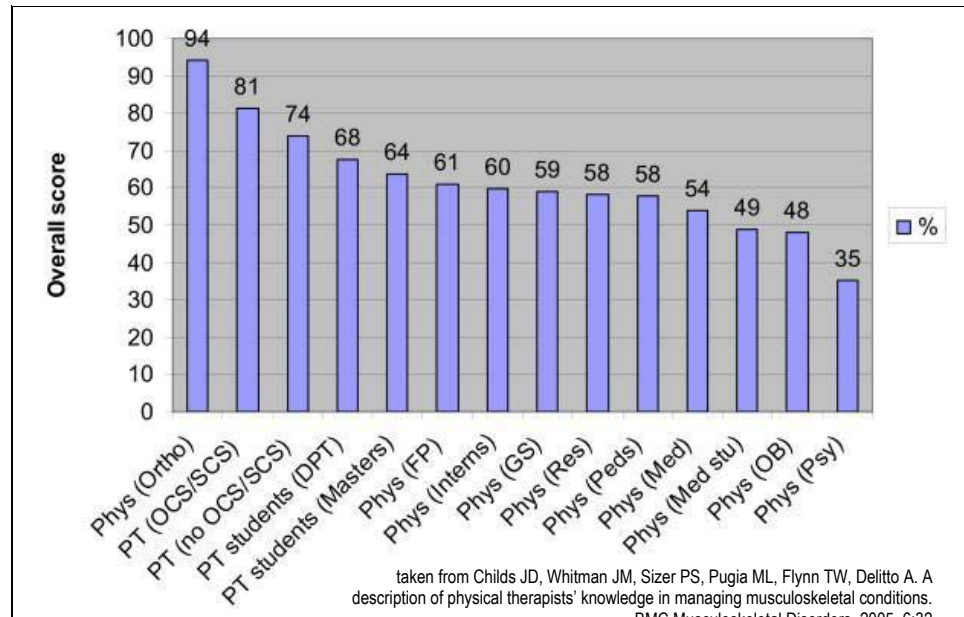


Traditional strengthening and stretching focused rehabilitation programs to address the consequences of 1st and 2nd degree hamstring strains may be inadequate in minimizing recurrence or accelerating return to activity. A prospective randomized comparative study in the March 2004 issue of the Journal of Orthopedic and Sports Physical Therapy by Marc A. Sherry and Thomas M. Best (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15089024&query_hl=3&itool=pubmed_docsum) showed that a program consisting of progressive agility drills and trunk stabilization activities ...

- continued on page 3

Direct Access Knowledge continued ...

The chart below from the article seems to support the contention that physical therapists have the requisite knowledge base to safely and effectively provide patient care for musculoskeletal conditions in a direct access setting.



Overall scores on the musculoskeletal knowledge examination among physical therapist students, licensed physical therapists, and previous data using the same examination among physicians. All physician-related data was derived from other sources.

PT = physical therapist, Phys = physician, OCS = Orthopaedic Clinical Specialist, SCS = Sports Clinical Specialist, DPT = doctoral physical therapy program, MPT = master's physical therapy program, Ortho = orthopaedics, Other = anesthesia, emergency medicine, ophthalmology, radiology, and transitional, FP = family practice, GS = general surgery, Res = Resident, Peds = Pediatrics, Med = internal medicine, Med stu = medical student, OB = obstetrics-gynecology, and Psy = psychiatry

Question of the Month



"Is it worth prophylactically manipulating an acute ankle sprain to prevent chronic problems from developing? It appears as though the literature that addresses ankle manipulation only does so once the problem has become chronic or the patient is not responding to a traditional treatment protocol.

J.H., PT - Wichita, KS

Really interesting question. I think most clinicians (myself included) would hesitate to manipulate an acute injury for a couple of reasons - 1) concern about further tissue damage and 2) lack of chronicity with resultant limited accessory motion. However, the literature does seem to support manipulation in acute lumbopelvic injuries so maybe the pathoanatomical model inadequately explains pain and disability.

As you suggest, a few recent

Studies (Whitman, et al *Man Ther*, 2005; Pellow, et al *J Manipulative Physiol Ther*, 2001, Green, *Phys Ther*, 2001) all seem to indicate that manipulation or mobilization has a positive effect (ROM, pain, function) in recalcitrant ankle sprain cases.

Their is another study that I've only read the abstract (Eisenhart AW, et al. *J Am Osteopath Assoc*, 2003 Sep; 103(9):417-421) that showed an "orthopedic manipulative treatment" administered in

the emergency department caused an improvement in edema, pain, and ROM as compared to a cohort group that only received standard conservative therapy so there may be some validity to the acute manipulation perspective. I hope to see more research in this area to help clarify a preferred practice pattern.

Questions you would like addressed in a future issue can be sent to mulliganpt@comcast.net



Hamstring Rehabilitation continued -



was more effective than a program of hamstring specific stretching and strengthening in promoting a return to sports and prevention of recurrence.

See Table 1 below that highlights the significant differences between the two treatment groups.

While this study does not tell us if the stretching/strengthening intervention caused or allowed the high recurrence rate it does suggest that attention to proximal neuromuscular control (the origin of the hamstrings on the pelvis) is warranted.

The agility and stabilization group's treatment focused on non-specific hamstring rehabilitation and emphasized activities functional movement patterns such as supine, sidelying, and prone bridging and "planks", balancing activities, PNF techniques, dynamic windmill stretching, and activity simulation.

The major limitation of this study is its potential for author bias secondary to no blinding of the subjects, examiners, or investigators and the lack of baseline comparability between the two cohort groups. Despite these limitations the findings are quite overwhelming.

While I would not necessarily abandon traditional rehabilitation techniques I think this study underscores the importance of looking at how the injury occurs and utilizing rehabilitation techniques that include proximal control and eccentric function. By the way, this article won the JOSPT Excellence in Research Award for being the most outstanding research manuscript published in 2004.

Medicare Cap Update

As of the first of year, Medicare has capped outpatient rehabilitation coverage at \$1,740 per beneficiary for 2006. Congress adjourned in late December without completing work on a budget reconciliation bill, allowing the current moratorium on the Medicare therapy cap to expire at the end 2005. Even though it is anticipated that Congress will likely consider modifications to the cap later in January, outpatient Physical therapists should already have taken action to ensure your practice is prepared to protect your patients and cope with the financial implications of the cap. The APTA has a wealth of resources to assist you with this preparation. Here is a link to their site that has multiple documents that include frequently asked questions, original CMS transmittals, model letters for patients and therapists, and a legislative action center.

http://www.apta.org/AM/Template.cfm?Section=Therapy_Cap&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=188&ContentID=18639



Even if you do not practice in the outpatient therapy setting I'd encourage you to be informed about this change in reimbursement as its trickle down effect will have an impact on the profession as a whole.



"Featured Internet Link"



<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

PubMed is the database housed within the National Library of Medicine and is based on Medline (Index Medicus). It is considered the premier data base in the world with over 4600 refereed journals and nearly 13 million citations dating back to 1996. Best of all it is free to access.

Table 1

	Traditional stretch and strengthening rehab	Progressive agility and trunk stabilization rehab	Statistically significant?
Mean time to return to sport	37 ± 28 days	22 ± 8 days	no
Reinjury within two weeks	6 of 11	0 of 13	yes
Reinjury within one year	7 of 10	1 of 13	yes

Sherry MA, Best TM. A comparison of 2 rehab programs in the treatment of acute hamstring strains. J Orthop Sports Phys Ther. 2004; 34(3):116-126.

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"By learning you will teach; by teaching you will learn"


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Rehabilitation Exercise Technique

A common area of weakness in the lower extremity is the gluteus medius. Hip weakness has been associated with many lower extremity dyfunctions such as hip osteoarthritis, patellofemoral syndrome, and lateral ankle sprains to name a few. An excellent study on hip EMG activity was recently published in the Journal of Orthopedic Sports Physical Therapy (<http://www.jospt.org/archive/ao.cfm?month=August&year=2005>). This investigation quantified muscle activation in a variety of common weight bearing and non-weight bearing rehabilitation exercises. As you might have predicted, the sidelying hip abduction and weight bearing abduction (particularly a pelvic drop) exercises created the greatest percentage of a maximal voluntary contraction.

An excellent alternative for the non-weight bearing patient is the the "clam shell" or "donkey kick" exercise pictured to the right. From a quadruped position the patient initially abducts the the thigh as high as possible and then extends the hip and knee before returning to the starting position. The patient is taught to control spinal substitution motions such as rotation.

I use this exercise when the higher EMG activity in a standing position is contraindicated or the patient is still unable to weight bear. A modification of the exercise is to place the patient in sidelying where the abduction component of the exercise is anti-gravity. Overload to the exercise can be provided through manual, elastic, or cuff weight resistance.



Featured Home Study Program Meniscal Injuries of the Knee

A new test was described in a recent issue of the Journal of Bone and Joint Surgery. The "Thessaly Test" is a dynamic test in which the patient rotates the whole body while in a unilateral stance position with the knee flexed 20°. Reproduction of joint line pain or mechanical symptoms at the knee constitutes a positive test. The authors demonstrated over 90% diagnostic accuracy with this examination technique. They found this special test to be more sensitive and specific than tenderenss to joint line palpation or the McMurray's and Apley's test.

A complete critical review of this article can be found at <http://www.hsedu.com/JournalClub/2006/1-05-06.pdf>. For additional information on the diagnosis and management of meniscal pathology please refer to our home study on knee meniscal injuries. This study can be viewed or

read free of charge. A post-test for CEU credit is available for a fee at <http://www.continuing-ed.cc/homestudy.htm>



Thessaly Test	Medial Meniscus	Lateral Meniscus
Sensitivity	89%	92%
Specificity	97%	96%
% False +	2%	4%
% False (-)	4%	1%
Accuracy	94%	96%

Reference: Karachalios T et al. The diagnostic accuracy of new clinical test for the early detection of meniscal tears. J Bone Joint Surg. 2005. 87:955-962.

Home Studies Now Available

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Lateral Ankle Instability	.2 CEUs
Foot-Ankle Surgeries	.2 CEUs
Knee Meniscal Injuries	.2 CEUs
Orthopedic Hip Injuries	.2 CEUs
Goniometric Examination	.2 CEUs
Principles of Joint Mobilization	.3 CEUs
Functional Anatomy of the Shoulder	.3 CEUs
Scapular Significance: Ortho Perspective	.2 CEUs
Proximal Humerus Fracture Rehab	.2 CEUs
Examination-Treatment of Hand/Wrist	.3 CEUs
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