

## **Diastasis of symphysis pubis and labor: Systematic review**

Alicia M. Urraca-Gesto, PT, et al.

Symphysis pubis diastasis (SPD) is an infrequent complication of labor that can impair women's general health through failure of the stability of the pelvis. Although conservative approaches are often used to treat SPD, notably few studies have analyzed the effect of these methods in managing the symptoms of women with SPD. This study reviewed the available literature on the conservative treatment of SPD. Although the overall results of conservative treatment were unclear because of the type and design of the reviewed studies, most of the studies reported bed rest and a pelvic girdle as basic treatments. Additionally, the few clinical trials reviewed recommended additional physiotherapy, including strengthening and stabilizing exercises, to reduce SPD symptoms.

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## **Predicting prosthetic prescription after major lower-limb amputation**

Linda Resnik, PT, PhD, OCS; Matthew Borgia, AM

This article describes prosthetic limb prescription in the first year following lower-limb amputation. Veterans with below-foot and ankle amputation were more likely to be prescribed a prosthesis, and those with above-knee amputation were less likely than those with below-knee amputation. Veterans in the Northeast and Midwest were more likely to be prescribed a prosthesis than those in the South. African-American race, longer length of hospital stay, older age, congestive heart failure, paralysis, other neurological disease, renal failure, and admission from a nursing facility were negatively associated with device receipt.

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## **Accessibility of outpatient healthcare providers for wheelchair users: Pilot study**

Karen L. Frost, PhD, MBA, et al.

Wheelchair users may receive less thorough healthcare because of inaccessible facilities, lack of accessible equipment, and medical staff not trained in the Americans with Disabilities Act (ADA). We conducted site assessments and surveyed clinical managers at 30 primary and specialty clinics to assess ADA compliance. Most restrooms and examination rooms were noncompliant, and most clinics did not have a height-adjustable examination table or accessible weight scale. Patients were examined while they remained seated in their wheelchair and asked to bring someone to help transfer. These practices are not compliant with the ADA. We recommend clinics conduct self-assessments and provide training on the ADA.

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## **Effects of hyperthyroidism on hand grip strength and function**

Esra Erkol İnal, MD, et al.

We hypothesized that the function of distal muscles may be affected by hyperthyroidism since skeletal muscle is one of the major target organs of thyroid hormones. Primary hyperthyroidism seemed to affect hand dexterity and function more than hand grip strength and was also associated with reduced physical function. This study will be valuable in leading clinicians to pay appropriate attention to hand function deficits in patients or Veterans with primary hyperthyroidism. Clinicians should consider primary hyperthyroidism in patients or Veterans who have impairment in hand function and/or dexterity.

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**Traumatic brain injury in U.S. Veterans with traumatic spinal cord injury**

Graham H. Creasey, MD, et al.

The records of U.S. Veterans with traumatic spinal cord injury being followed up at the Spinal Cord Injury Service of a Department of Veterans Affairs medical center were examined for references to traumatic brain injury. On average, 24 percent were identified as having had a traumatic brain injury at the same time as their spinal cord injury. During the last decade, this number was approximately 50 percent. This change is believed to be due to improved awareness of the traumatic brain injury rather than a change in incidence, but documentation is currently inadequate to determine incidence.

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**Physical performance and self-report outcomes associated with use of passive, adaptive, and active prosthetic knees in persons with unilateral, transfemoral amputation: Randomized crossover trial**

Brian J. Hafner, PhD; Robert L. Askew, PhD, MPH

Modern prosthetic knees have the potential to greatly improve function, health, and quality of life for people with above-knee amputation. Evidence from studies that compare different knees is needed to inform clinical selection and justification of available knee technologies. This study compared outcomes from people with above-knee amputation using prostheses with three different types of prosthetic knees. Results of this study can be used to guide selection and set realistic expectations for those who prescribe, fit, and use these prosthetic knee technologies.

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**Student Veteran perceptions of facilitators and barriers to achieving academic goals**

Sonya B. Norman, PhD, et al.

Over 1 million Veterans who served in the conflicts in Iraq and Afghanistan (Operation Iraqi Freedom/Operation Enduring Freedom) have accessed the education benefits of the Post-9/11 GI Bill; however, recent data indicate that many may not complete their degree. It is important to understand the experience of student Veterans, including their perceived facilitators and barriers to achieving their academic goals, in order to develop interventions and policy that can help student Veterans achieve their goals.

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**Core muscle characteristics during walking of patients with multiple sclerosis**

Nathaniel B. Ketelhut, BS, et al.

The Department of Veterans Affairs treats a large number of veterans with multiple sclerosis (MS). This study investigated core muscle characteristics during walking in patients with MS. We found that muscles on the less-affected side of patients with MS were activated more during walking and that there was greater muscle volume on the more-affected side of certain muscles. These findings indicate that patients with MS use compensatory mechanisms during walking to maintain balance and posture. This article may provide physical therapists new directions for treatment of postural stability and balance in Veterans with multiple sclerosis.

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**E-mental health preferences of Veterans with and without probable posttraumatic stress disorder**

Julia M. Whealin, PhD, et al.

A number of electronic services that promote mental health, called e-mental health services, are being disseminated by the Veterans Health Administration and other private and public agencies. This study sought to understand willingness to use e-mental health services—ranging from smartphone applications to video teleconferencing—among Veterans in Hawaii. Results found that, compared with their peers, Veterans who screened positive for posttraumatic stress disorder (PTSD) were less willing to use each type of e-mental health service, despite a greater desire for mental health services. Our results support the need for a better understanding of Veterans' e-mental health needs, particularly among Veterans with PTSD.

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**Participatory design and validation of mobility enhancement robotic wheelchair**

Brandon Daveler, MS, et al.

The design of the mobility enhancement robotic (MEBot) wheelchair was based on feedback from electric powered wheelchair (EPW) users regarding the conditions they encounter when driving in both indoor and outdoor environments. Phase I involved conducting a participatory design study to understand the conditions and barriers EPW users found to be difficult to drive in/over. Phase II consisted of creating a computer-aided design prototype EPW with advanced applications. Phase III involved demonstrating the advanced applications, gathering feedback from end-users, and discussing improvements to be made in future iterations. The design of MEBot received encouraging input from EPW users to further the design.

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