WEBSITE/APP REVIEW

Clinical pattern recognition: hip and thigh pain
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Application last updated: 4 March 2015
Developer: Michael Wong
Version: 1.2.2
Size: 350 MB

Compatibility: Requires iOS 7.0 or later. Compatible with iPhone, iPad and iPod touch. This app is optimized for iPhone 5 and iPhone 6.

Price: $19.99

Clinical pattern recognition is a series of applications dedicated to anatomical areas of the body including the hip/thigh, knee, ankle/foot and lumbar spine. It enumerates numerous clinical presentations of different disease processes with associated physical exam findings. It offers a variety of manual and therapeutic exercises for treating these conditions. This review focuses on the hip and thigh portions of this application series. The application is primarily a tool for physical therapist and patient education.

On the opening index screen, one visualizes six selection screens including clinical pattern recognition, clinical practice guidelines, physical exam, manual therapy, therapeutic exercises and special tests. Upon choosing the clinical pattern recognition tool, the user is shown seven patterns of hip pain on a still-animation platform. These patterns include lateral thigh pain extending to knee, posterior gluteal pain, inner thigh pain, posterior knee pain, lateral thigh pain isolated to the greater trochanter and groin pain. After pattern selection, the application provides a differential diagnosis based on the location of the pain. For example, if posterior gluteal pain is chosen it will provide a differential of piriformis syndrome, hamstring strain and hip osteoarthritis.

Each diagnosis is described with the prevalence, clinical findings, physical exam, interventions and outcome measures. Selecting the prevalence tab shows the occurrence of the condition, associated sporting activities, sex/age predominance and published references. Next, the clinical findings tab will provide a video showing a reenactment of a patient presenting with the selected condition. It will also describe a patient’s commonly associated symptoms and clinical history.

The physical exam tab lists key physical examination findings, movement faults and associated physical impairments. Numerous clinical tests are provided for each disease process supported by thoughtful video demonstrations and reflections on conditional movement faults. The purpose of each exam is well described with a focus on the proper positioning of therapist and patient. In addition, many of the examinations are described with relevant statistics such as reliability, sensitivity, specificity and positive/negative likelihood ratio. Finally, detailed cues and related objective measures are made available with published references.

The intervention tab is a resourceful tool that can be used for patient care. It offers high quality videos of therapeutic exercises and manual therapies to be used by patients and therapists. Written descriptions of the maneuvers are provided with associated cues and objective measurements. Further, several patient reported outcome measures are available to document and follow patient progress.

There are limitations to note in this application. First, the program algorithm is based on location of pain to identify pathologic diagnoses. These symptom locations may not correlate with traditional presentations of diseases. For example, hip osteoarthritis is within the differential of the posterior hip and knee pain but may be atypical in a clinical setting. Second, the application has redundancies in different menus of the program. This simultaneous information may make user navigation confusing. Third, the greatest flaw in this program is the lack of association between...
lumbar spine pathology and clinical signs and symptoms about the hip joint. However, clinical pattern recognition does provide a separate lower back pain application for an additional purchase fee.

In review, Clinical Pattern Recognition: Hip and Thigh Pain is a very informative application for both physical therapists and patients. It does not provided diagnostic or treatment modalities for lower back pathology that can often mimic hip pain; however, there is a separate application focusing on the lower back for an additional payment. Regardless, this application does an excellent job showing diagnostic exams and therapeutic modalities that can be used in clinic or by the patient at home.