Dynamic Chiropractic

DIAGNOSIS & DIAGNOSTIC EQUIP

Diagnostic Testing: Don't Take the Details for Granted

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In recent years, there has been a resurgence in some of the specialty programs in chiropractic. Two of these programs, the orthopedic and sports programs, share many similarities, the types of conditions treated, and of specific interest here, the use of orthopedic testing for diagnosis.

With this in mind, if you are a student in either program, a chiropractic college student or a doctor who just wants to refresh your clinical skills, the following information will help guide your study of orthopedic testing. Breaking each test into its components helps a student / practitioner at any level develop a clear understanding of the performance and clinical use of the test.

Test Names

Many tests have more than one name. Typical examples are the patellar grinding test, also known as Clarke's test, and crossed straight-leg raising, also known as well-leg raising. It is good to know the most common name for each test, as well as any synonyms. Test questions and clinical records may use different names based on their author's experience.

Test Utilization

Most tests have a single intended diagnostic meaning. However, a few have multiple diagnostic meanings. Hibb's test is a good example. Some describe the test as an SI joint test, while others describe the test as a hip or coxa joint test. In cases in which tests have multiple diagnostic means, the reason "why" there is a difference is sometimes the key to learning the test.

Equipment

Most orthopedic tests do not require the use of equipment or instruments. If a test does require equipment, the equipment must be available and its use understood. Devices that measure range of motion and other instruments, such as a blood pressure cuff for the tourniquet test, are good examples.

Test Performance

Positioning of the doctor and patient is of the utmost importance. Care must be taken to ensure accurate test performance using appropriate ranges of motion, joint angles and other testing factors.

Positioning is also essential for patient stabilization. Stabilization includes stabilization of the patient's body in general and stabilization of the regions tested. Stable patient positioning provides comfort and security for the patient, and can help relieve patient anxiety.

Some photos in textbooks depict doctor and patient positions that are awkward. Usually, due to an author attempting to show a particular detail about a test that is difficult to see during a more realistic positioning, you must develop an understanding of when to adjust their position in actual practice.

Once correct positioning is established, proceed with testing by evaluating the normal or uninvolved side first if the patient's complaints involve the extremities. Beginning with the good side establishes a baseline for comparison with the symptomatic extremity. If the test is a midline test (the Soto-Hall test, for example), testing proceeds without establishing a baseline.

The movements of testing are of particular importance. Whether the movement is passive (performed by the doctor) or active (performed by the patient), attention is paid to the order, speed, angles and ranges of motion for tests. How one gets to the final testing position is just as important as getting to the final testing position.

Visualization

Some tests require vigilance by the clinician. Apprehension tests are common examples. The shoulder and patellar apprehension tests both require monitoring of the patient's facial expressions. An apprehensive look on the patient's face is the indicator for a positive or pathological result for both tests.

Questioning the Patient

You must ask patients for a description of a test's effects: "Does [this or that] hurt during the test? However, asking about very specific symptoms can lead the patient. Generalized questions are preferred. A better choice for obtaining the patient's response to testing is to simply ask, "Does this affect you in any way?"

Pathological Indicators

All tests have indicators for positive or pathological findings. Unfortunately, this area of testing is usually the least understood. Clinicians can generally provide the textbook description of what responses indicate a positive test. However, in practice, they often record any reaction to a test as a positive result. Misdiagnosis and mistreatment occur when any reaction is considered positive.

Tests are to be recorded according to their intended meaning, not according to any response obtained. Responses other than the reaction associated with the test may be relevant, but they are not diagnostic of the condition for which the test is known.

Reasons for atypical responses include the patient being in such intense pain that every movement is painful; and some tests have overlapping mechanisms of performance and incorrect performance.

Time

Many tests have a time component. Phalen's, elbow flexion, and drift tests all require the patient to hold the examining position to allow time for symptoms to develop.

Confirmatory Tests

For any test you use, you must know at least two confirmatory tests. Very few orthopedic tests can

stand alone in arriving at a diagnosis. In recent years, the idea of confirmatory tests has been taken further with the use of test clusters.

Test clusters are groups of tests that have been studied together to determine their usefulness as a group, as opposed to their value individually. The basic premise is, the higher the numbers of positive tests in the cluster, the more likely the condition is present.

Clinical Takeaway

When dealing with orthopedic tests (either for study or use), break down the characteristics of the tests into the components described above. Doing so will allow you to develop a thorough understanding of the tests for academic and practical applications.

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