MMT MOD 1
Getting the initial assessment data



There are usually six tests commonly run at the start of initial, re-exam, and final patient visit. They are: known as 'Vitals'

- 1.Weight
- 2.Temperature
- 3.Pulse
- 4.Blood Pressure
- 5.Respiration
- 6.Pain



1. Weight. Weight -- and weight change -- is one of the key indicators of a person's health. If a person is significantly overweight or underweight, it can signal underlying disease. This is likewise for any significant change in weight in the recent past, particularly if that change was not intended (e.g., not the result of diet and exercise). When taking a patient's weight, be sure to be matter-of-fact and non-judgmental. Many people are selfconscious about their weight, and any indication of judgment, even if it's just in your facial expression, vocal tone or body language, can be taken as threatening or even offensive. Leave discussions of weight up to the doctor.



2. Temperature. You will likely take the patient's temperature using an ear thermometer. The reading may take several seconds to register. Take the time to talk calmly to the patient and assess her/her orientation. If the patient seems agitated, confused or unresponsive, this should be noted on his/her record.

Most people think of 'normal' body temperature as 37C (98.6F), measured using a thermometer in the mouth. However, the concept of there being a normal body temperature is somewhat misleading. In fact normal body temperature can vary according to a wide range of factors including a person's age, the time of day and whether someone is active or not.

The 'normal' benchmark for body temperature was established by a 19th century German physician called Dr Carl Wunderlich. He is credited with taking temperature readings from thousands of patients, which led him to propose that 37C (98.6) was normal body temperature.



3. Pulse. You can take the pulse by placing a stethoscope over the left side of the patient's chest or by placing your thumb and index finger on the patient's wrist. You'll count the number of beats for 30 seconds. Make note of any extra or skipped beats you detect during that period. After 30 seconds, double the final number to determine the number of beats per minute.



Age	Beats Per Minute (BPM)
Newborns (0-3 months)	100-150
Infants (3-6 months)	90-120
Infants (6-12 months)	100-160
Children ages 1-10	70-130
Children over age 10 and adults	60-100
Well-conditioned athletes	40-60

4. Blood Pressure. Carefully wrap your blood pressure cuff around the patient's upper arm. Place the stethoscope's ear tips in both ears, and the diaphragm on the brachial artery at the base of the inner elbow. Inflate the blood pressure cuff to 200 mg., then slowly release the valve. Listen for the telltale pulse. When you hear this, note the number on the meter. This is the systolic pressure. When the pulse disappears, note that number as well. That's the diastolic pressure.



Blood Pressure
Beginning sound = Systolic
End of sound = Diastolic

5. Respiration. The 30 seconds or so it takes to wrap the blood pressure cuff on the patient's arm is a good time to observe his/her respiration. Count the number of breaths taken over the half-minute period, and be mindful of any obvious breathing problems, such as coughing or shortness of breath. Because respiration can be controlled voluntarily, it's important not to tell patients what you're doing because they're apt to alter their breathing in response, even subconsciously.



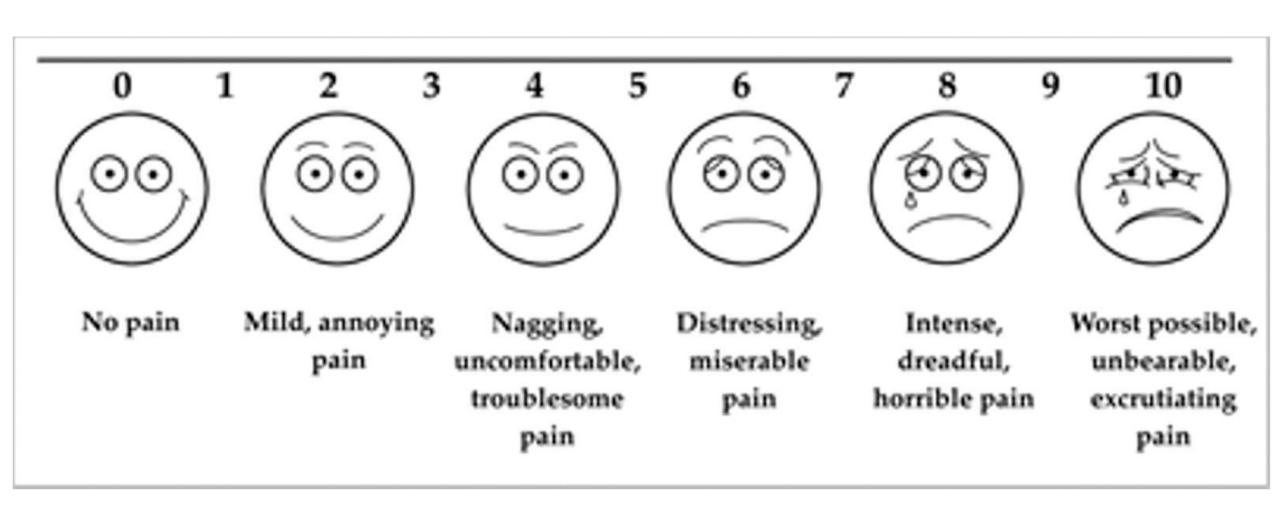


6. Pain. Finally, ask the patient if they're in any immediate pain. If the answer is yes, ask them to rate that pain on a scale of one to 10, with 10 being unbearable. Make a note about both the site of the pain and its intensity for the doctor's review.

Pain is subjective

Meaning it varies greatly from individual to individual and can also vary within the same individual on the basis on varied conditions, time of day, weather, or other environmental or emotional influences.









http://postureanalysis.com

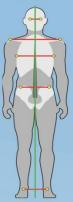




PostureScreen Exam for Cheryl Smith performed on 7/12/12

and side views. If the posture is deviated from normal, then the spine is also deviated from the normal healthy position. Unfortunately, abnormal posture has been associated with the development and progression of many spinal conditions and injuries including: increased muscle activity and disc injury, scoliosis, work lifting injuries, sports injuries, back pain, neck pain, headaches, carpal tunnel symptoms, shoulder and ankle injuries as well as many other conditions. Additionally, postural abnormalities in adolescent years have been recognized as one of the sources of pain syndromes and early arthritis in adulthood. Therefore, posture should be checked and corrected in children before more serious problems can occur.

Normal



Your Posture from Front



Your Posture Viewed from the Front

Head is shifted 0.65" left and is not tilted

Shoulders are shifted 0.22" right and are tilted 5.2° left

Ribcage is shifted 0.41" right

Hips are shifted 1.51" left and are not tilted

Any measurable deviation from normal posture causes weakening of the spine as well as increased stress on the nervous system which can adversely affect overall health.

Normal



Your Posture from Side



Your Posture Viewed from the Side

Your head weighs approximately 9.5 lb and is shifted 2.33" forward

Based on physics, your head now effectively weighs 31.7 lb instead of 9.5 lb

Shoulders are shifted 1.94" backward

Hips are shifted 2.51" forward

Knees are shifted 0.83" forward

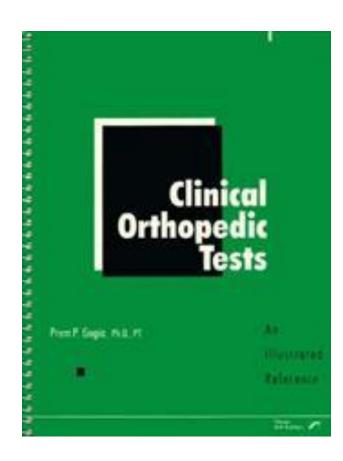
PAIN SCALE

5 6 7 8 9 10

During this assessment, you noted that your pain was 5 out of 10 (worst possible pain). Remember that pain and symptoms can be directly associated abnormal faulty body structure - ie. Abnormal Posture

Your PostureScreen evaluation demonstrates that you have postural abnormalities. In the future, structural deviations could cause you symptoms of pain as well as a myriad of other health problems. Consequently, it is advised that you complete a thorough clinical evaluation with a health care and/or fitness professional trained in postural corrective techniques.

Basic Ortho Tests that can be performed easily and provide the clinician with a good idea of the patients condition and what treatment method to be used.



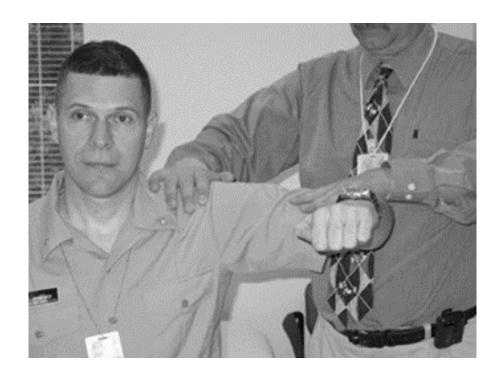
Muscle strength is often rated on a scale of 0/5 to 5/5 as follows:

- •o/5: no contraction
- •1/5: muscle flicker, but no movement
- •2/5: movement possible, but not against gravity (test the joint in its horizontal plane)
- •3/5: movement possible against gravity, but not against resistance by the examiner
- •4/5: movement possible against some resistance by the examiner (sometimes this category is subdivided further into $4^-/5$, 4/5, and $4^+/5$)
- •5/5: normal strength



DELTOID Position of Patient: With the patient sitting the elbow should be flexed to indicate the neutral position of rotation.

Sample Instructions to Patient: "I am going to push down and I want you to resist me. Keep your arm up as I push down."



Position of Therapist: The therapist should stand at test side of patient and support abducted arm under the elbow and wrist if necessary.

Test: Patient attempts to bend the elbow with the hand supinated.

Sample Instructions to Patient: "Bend your elbow..."



<u>Test:</u> Support the patients forearm under the wrist while the other hand used for resistance is placed over the dorsal surface of the metacarpals. Do not permit full extension of the fingers.

<u>Sample Instructions to Patient:</u> "Bring your wrist up, hold it. Don't let me push it down."



<u>Position of Therapist:</u> The therapist stands at the side of the tested limb and the testing hand is placed over anterior surface of distal leg just above the ankle. The other hand is placed under the distal thigh.

<u>Test:</u> The patient extends the knee through available range of motion but do not allow knee to "lock" into extension during the test.

Sample Instructions to Patient: "Straighten your knee and hold it, don't let me bend



<u>Test:</u> The patient dorsiflexes the ankle joint foot without extending the great toe. Pressure is applied on the dorsum of the foot (in the direction of plantar flexion and eversion).

Sample Instructions to Patient: "Pull your foot up to the ceiling."



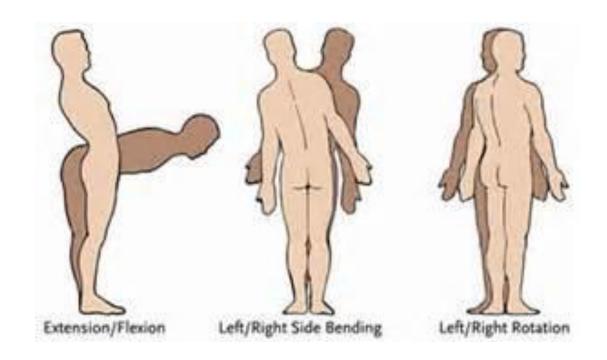
<u>Test:</u> The patient abducts against the applied resistance without flexing or rotating the hip in either direction. Resistance by examiner is straight and downward.

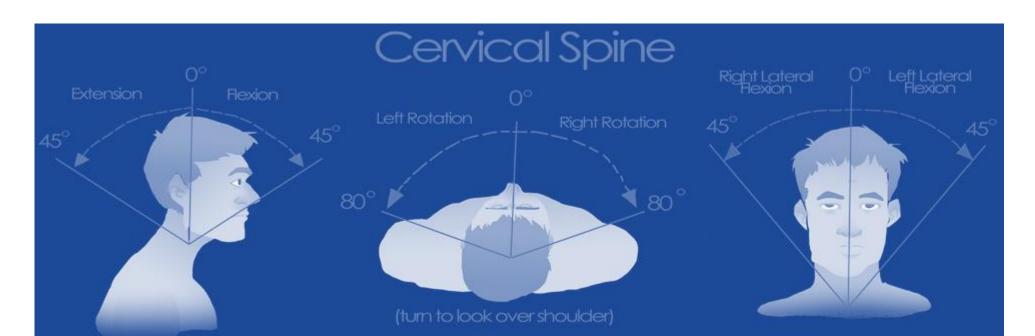
<u>Sample Instructions to Patient:</u> "I am going to push down on your leg and I want you to resist me."



GLUTEUS MEDIUS





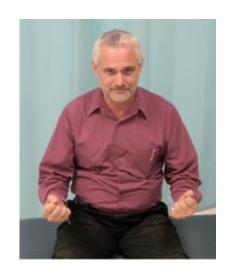


Valsalva's maneuver

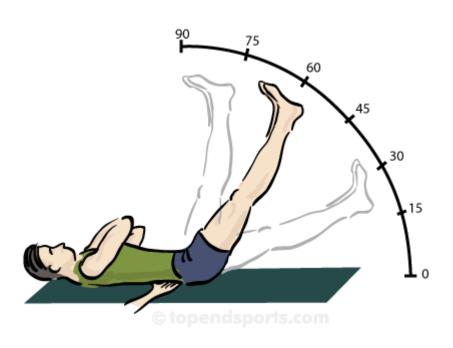
hold breath and bear down INC intrathecal pressure

Used to identify a SOL Space Occupying Lesion.

Disc Osseous formation Ligament hypertrophy



SLR



0-30 deg Nerve root compression (Discal)

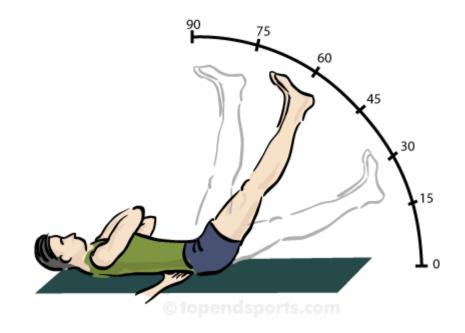
30-60 deg Sciatic nerve

60+ Lumbosacral

Remember the nerve roots are not brought to tension until after at least 35 deg of flexion. So the lesser angle that pain is produced the more likely disc involvement.

Well Leg Raise sign

The SLR is performed on the unaffected leg. If pain is referred back to the symptomatic side, this indicates nerve root compromise by an extruded disc.



Cox Sign

SLR on <u>involved</u> side causes the pelvic on that side to raise off the table (rather than just the hip flexing)

This can be an indication of disc prolapse and protrusion of the nucleus into the IVF on the involved side



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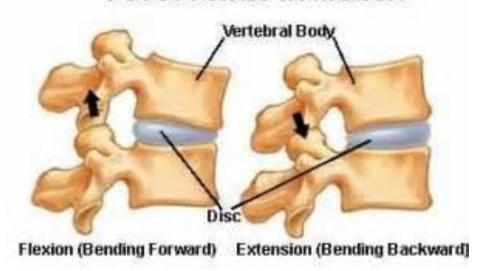
Standing Kemps test



Can be performed standing or sitting.

STANDING: RO facet irritation

Facet Joints in Motion



Cervical Compression Test

Testing for: Compression of the cervical nerve root or facet joint irritation of the cervical spine.



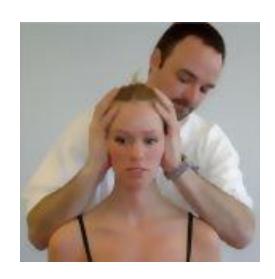
Client presents with tingling going down unilateral or bilateral arms.

Is it a disc, facet, or peripheral entrapment due to fascia or muscle?



Cervical Distraction:

Used after Cervical compression to relieve pressure on cervical nerve roots.



If Cerv compression caused pain and distraction relieved then client most likely has a disc/facet issue causing neural impingement.

If Cerv compression caused NO pain and distraction caused pain then client most likely has a spastic cervical muscle or peripheral entrapment.

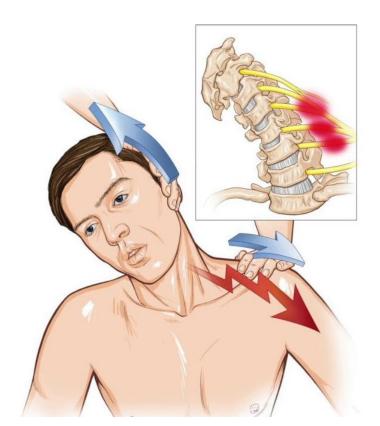
MM stripping and stretching needs to be done.

Shoulder Depression Test

Positive:

Pain on the side of the compression indicates irritation or compression nerve root or foraminal irritation.

Pain on the side of the stretch indicates hypomobile joint capsule or a nerve sleeve irritation or muscle splinting.



Adhesive Capsulitis Abduction Test

Tests for Frozen shoulder. Restricted ROM at the shoulder caused by fibrosing and adhesion of the axillary fold of the inferior Glenohumoral Joint Capsule



Palpate inferior angle of scapula and monitor is ROM

With other hand slowly abduct the humerus Make note when the scapula starts to move

Pos Sign:

Painful, leathery feel at end range before 90 deg of abduction.

Functional Leg length (Compensatory in nature)

Examine the ASIS and PSIS. Release any spastic or tight muscles then re examine leg length.



Anatomical Leg Length

ASIS to medial ankle



Case Study

"BOB"

Bob presents with

LBP

L leg pain to top of foot TTF in buttocks on L side

<u>Ortho</u>

- + SLR on L at 35 deg
- + Kemps on L
- + Cox on L

Neg Valsalva

MUCSLE

- +5 on R leg
- +3 on L leg



End MOD 2