SUGGESTED EXAM PROTOCOL FOR THE PHYSICIAN

MUSCULOSKELETAL

Have patient:	To check for:
1. Stand facing examiner	AC joints, general habitus
2. Look at ceiling, floor, over shoulders, touch ears to shoulders	Cervical spine motion
3. Shrug shoulders (against resistance)	Trapezius strength
4. Abduct shoulders 90 degrees, hold against resistance	Deltoid strength
5. Externally rotate arms fully	Shoulder motion
6. Flex and extend elbows	Elbow motion
7. Arms at sides, elbows 90 degrees flexed, pronate/supinate wrists	Elbow and wrist motion
8. Spread fingers, make fist	Hand and finger motion, deformities
9. Contract quadriceps, relax quadriceps	Symmetry and knee/ankle effusion
10. "Duck walk" 4 steps away from examiner	Hip, knee and ankle motion
11. Stand with back to examiner	Shoulder symmetry, scoliosis
12. Knees straight, touch toes	Scoliosis, hip motion, hamstrings
13. Rise up on heels, then toes	Calf symmetry, leg strength

MURMUR EVALUATION – Auscultation should be performed sitting, supine and squaring in a quiet room using the diaphragm and bell of a stethoscope.

Auscultation finding of:	Rules out:
1. S1 heard easily; not holosystolic, soft, low-pitched	VSD and mitral regurgitation
2. Normal S2	Tetralogy, ASD and pulmonary hypertension
3. No ejection or mid-systolic click	Aortic stenosis and pulmonary stenosis
4. Continuous diastolic murmur absent	Patent ductus arteriosus
5. No early diastolic murmur	Aortic insufficiency
6. Normal femoral pulses (Equivalent to brachial pulses in strength and arrival)	Coarctation

MARFAN'S SCREEN – Screen all men over 6'0" and all women over 5'10" in height with echocardiogram and slit lamp exam when any two of the following are found:

1. Family history of Marfan's syndrome (this finding alone should prompt further investigation)
2. Cardiac murmur or mid-systolic click
3. Kyphoscoliosis
4. Anterior thoracic deformity
5. Arm span greater than height
6. Upper to lower body ratio more than 1 standard deviation below mean
7. Myopia
8. Ectopic lens

CONCUSSION -- When can an athlete return to play after a concussion?

After suffering a concussion, no athlete should return to play or practice on the same day. Previously, athletes were allowed to return to play if their symptoms resolved within 15 minutes of the injury. Studies have shown that the young brain does not recover that quickly, thus the Oregon Legislature has established a rule that no player shall return to play following a concussion on that same day and the athlete must be cleared by an appropriate health care professional before they are allowed to return to play or practice.

Once an athlete is cleared to return to play they should proceed with activity in a stepwise fashion to allow their brain to readjust to exertion. The athlete may complete a new step each day. The return to play schedule should proceed as below following medical clearance:

Step 1: Light exercise, including walking or riding an exercise bike. No weightlifting.
Step 2: Running in the gym or on the field. No helmet or other equipment.
Step 3: Non-contact training drills in full equipment. Weight training can begin. Step 4: Full contact practice or training.
Step 5: Game play.

If symptoms occur at any step, the athlete should cease activity and be re-evaluated by a health care provider.