

How to Arrive at a Diagnosis: Treating Musculo-skeletal Conditions (Traditional Asian Medicine Diagnosis and ICD-9 Codes)

by Dr. Kevin P. McNamee, DC, L.Ac.

Taking a history, performing an examination, ordering laboratory and diagnostic imaging, designing a treatment plan, and monitoring the results of the treatment are all part of the patient encounter. There are many details to remember and decisions to make in this process. To reduce or minimize forgotten steps, different acronyms are used. This will free your thoughts for clinical decisions, rather than concentrating on which questions to ask, tests to be performed, etc.

The patient's diagnosis is determined by the practitioner using data from the:
A) patient's chief complaint, B) patient's subjective statements, C) examination
D) objective findings from the examination, laboratory, and diagnostic imaging and
E) any patient records. The key to arrive at a diagnosis is performing a quality history and examination, and/or ordering laboratory/diagnostic imaging if needed.

The sequence of events with the patient encounter is as follows: 1) The chief complaint leads to the history. 2) The history leads to the type of 3) examination. The history and examination may indicate any 4) diagnostic imaging and/or laboratory tests to be ordered.

The acronym **HIPPIRONEL** is used to help remember the parts of the patient encounter, as well as to keep one organized and not forget steps so the practitioner's thoughts are free to focus on the cause of the patient's chief complaints.

The History – (Chief Complaint and Past History)

The H in HIPPIRONEL stands for History – both current history of the chief complaint and past medical history. The history is broken into two acronyms – OPQRST (current history of the chief complaint) and FAOMASH (past medical history). The acronym for Present and Past History have the following definitions for each letter, along with questions the practitioner should be asking the patient.

Current History of the Chief Complaint (OPQRST)

(NOTE: This history form may be downloaded for use in practice from the web site www.TheSupplyCenter.com)

O	Onset/Occurrence	When did it happen? How did it happen? How often is it present? How long does it last when it is present? What is the intensity of the pain? Have you had this before? When was the last time?
----------	-------------------------	--

- P Palliative/Provocative** What makes it better? What makes it worse? Is there a change in different positions (lying, sitting or standing)? Is there a change during activity (walk, run, squat, rise)? Have you tried heat, cold, massage, stretches, exercises or medications?
- Q: Quality/Quantity** Describe the sensation. What is the sensation like (Sharp, Dull, Throbbing, Achy, Numbness, Tingling, Electrical, etc.)? On a zero to 10 scale, zero being no pain, 10 being the worst imaginable, what does it feel like in general? Does it restrict or stop your activities?
- R Radiation** Does the pain travel? If so, from where to where? How often is the radiation present and how long does it last?
- S Site** Does the pain change with patient's location (work, home, car, etc.)?
- T Time** Is there a change related to any time of day: morning, late morning, afternoon, evening or night time?

Past Medical History (FAOMASH)

- F Family History** What is the age and how is the health of your mother, father, sisters, brothers, grandparents, aunts and uncles? Include a genogram (with at least three generations).
- A Accidents** Any past motor vehicle accidents, severe falls, major injuries like fractures or dislocations? If so, when did they happen, what treatments were you given, and are there any residual problems from the injuries?
- O Other Doctors** Who have you seen for this condition and what have they done for it? Who is your primary healthcare provider?
- M Medications/Vitamins/Herbs**
Are you taking any medications, vitamins or herbs? For what condition(s)? Who prescribed them for you?

- | | | |
|----------|------------------------|--|
| A | Allergies | Do you have any allergies? Are you allergic to any medications? No Known Drug Allergies (NKDA) |
| S | Surgeries | Have you had any surgeries? Give examples if the patient does not recall.(Tonsils, appendix, gall bladder, hernia, uterus, ovaries?) |
| H | Hospitalization | Have you ever been hospitalized? When and what for? |

In addition to the above, the practitioner should ask the following questions

Usual Childhood Diseases (UCHD)

Have you had measles, mumps, chicken pox or other childhood diseases?

Social History:

Marital status? Any children? Your present and past employer? Any exposure to environmental agents? Religion? Hobbies? Recreational activities? What is your living condition? Where do you get your water supply? Do you smoke, drink, use IV drugs? Any blood transfusions? Multiple sex partners?

For veterans, include military service history question. For pediatric patients, include sleep, play habits and pets.

System Review:

Ask the patient: Do you have any problems with....

General

Weight loss, weight gain, weakness, fever, chills, fatigue, sweats, night sweats.

Skin

Rashes, pruritus, lesions, bruising.

Head

Trauma, headache, tenderness.

Eyes

Vision, changes in the visual field, glasses, last prescription change, photo phobia, blurring, diplopia, spots, discharge, inflammation.

Ears

Hearing changes, tinnitus, pain, discharge, vertigo.

Nose

Sinus problems, nosebleeds, obstruction, polyps.

Throat

Teeth, tongue, gums, dentures, lesions, hoarseness, sore throats.

Respiratory	Chest pain, sneezing, dyspnea, cough, amount and color of sputum, hemoptysis, history of pneumonia, history of influenza or pneumococcal vaccinations.
Cardiovascular	Chest pain, orthopnea (number of pillows used at night), dyspnea on exertion, paroxysmal nocturnal dyspnea, murmurs, hypertension, leg cramps.
Gastrointestinal	Appetite, dysphagia, nausea, vomiting, hematemesis, indigestion, abdominal pain, diarrhea, constipation, melena, bloating, and anal discomfort, hemorrhoids, change in stool shape and color, jaundice.
Genitourinary	Frequency, urgency, hesitancy, dysuria, hematuria, polyuria, nocturia, incontinence, venereal disease, discharge, sterility, impotence.
Gynecologic	Gravida/para/abortions, menarche, last menstrual period (frequency, duration, flow), dysmenorrhea, spotting, menopause, contraception, last pelvic exam and Pap smear.
Endocrine	Polyuria, polydipsia, polyphagia, temperature intolerance, thyroid difficulties, glycosuria, hormone therapy, changes in hair or skin texture.
Musculoskeletal	Arthritis, trauma, joint swelling.
Hematology	Anemia, bleeding tendency, easy bruising, lymphadenopathy.
Neuropsychiatric	Syncope, seizures, weakness, coordination, sensations, memory, mood, sleep pattern, emotional disturbances, drug and alcohol problems.

Inquiring (additional questions to be asked from the TCM paradigm)

Chills and Fever
 Perspiration
 Food and Drink, Appetite and taste
 Defecation and Urination
 Pain
 Sleep
 Menses and Leukorrhea

The Examination

After completing the history, the type of examination needed is determined based on the information gathered. For example, if the patient's history and examination indicate there is a problem with the right wrist. Therefore, there is no indication to examine the lower extremities. The practitioner should focus on the neck and upper extremity examination.

The acronym for the examination and diagnostic imaging / laboratory section is **I P P I R O N E L**.

IPPIRONEL

- I** Inspection
- P** Palpation - Superficial and Deep
- P** Percussion
- I** Instrumentation
- R** Range of Motion - Active, Passive and Resisted
- O** Orthopedic
- N** Neurological - Mental Status, Coordination, Cranial Nerve, Motor, and Sensory
- E** X-ray and Diagnostic Imaging - X-ray, CT, MRI, Bone Scan, Ultrasound, Thermography, EMG, NCV, EEG, etc.
- L** Laboratory - CBC, Chem Panel, etc.

The Diagnosis (Called Assessment in the Progress Notes)

Based on the chief complaint, history, examination, laboratory tests, diagnostic imaging and past medical records, the practitioner is to determine a diagnosis for each chief complaint. This is your diagnosis or your best educated guess of the condition you are treating. This includes the working diagnosis and the differential diagnosis, also known as other possible diagnosis. The differential diagnosis is the possible cause and contributing factors for the problem or symptom but not all the elements needed to make that diagnosis are present. Usually the practitioner is waiting for confirming diagnostic imaging or laboratory results. Thus, the assessment may change as the results of the laboratory testing and diagnostic imaging arrive.

Remember, the diagnosis is based on the data at hand and is your best educated guess of the condition. You are not being graded when making a diagnosis but it does need to be consistent with the chief complaint, patient subjective and exam objectives. As long as you have subjective and objectives to support the diagnosis, it is a reasonable choice and defensible.

Patient's are allowed to, and frequently do, have more than one diagnosis. There may be several diagnosis causing the patients chief complaint. Diagnosis codes used by the insurance industry are found in a book titled **International Classification of**

Diseases Volume 9 (ICD-9) code book. However, the diagnosis in Asian medicine healing paradigm are not included in this book nor in the insurance industry.

When communicating with the insurance company, a third party payer, the judicial system, etc. the **ICD-9 codes (International Classification of Diseases Vol 9)** are what is used to communicate the diagnosis (what is being treated). The healthcare provider should tailor ones reports, insurance billing forms and other communication in that terminology in order to be understood.

Steps to Determine the Diagnosis — Traditional Asian Medicine vs. ICD-9

ICD-9 Diagnosis and Differential Diagnosis

When performing a history and examination, one's subjective and objectives determine which diagnosis. Table 1 below lists the diagnosis and associated subjective and objectives that need to be present in order to use that diagnosis. All of the elements must be present to use that diagnosis. If some, but not all of the elements are present, then that diagnosis may be a differential also known as a Rule Out (abbreviated R/O).

- Step 1:** Conduct a history and examination.
- Step 2:** Based on the history and examination, order, if needed, laboratory and/or diagnostic imaging.
- Step 3:** Review any medical records from other practitioners.
- Step 4:** Go to Table 1 and match the history, exam and laboratory/diagnostic imaging to the list of diagnosis.
- Step 5:** If all the elements of the diagnosis listed on Table 1 are present, then this is a strong potential diagnosis for the patient.
- Step 6:** If some but not all of the diagnostic elements are present from Table 1, this diagnosis becomes a differential pending laboratory/diagnostic imaging results and/or the patients response to care.

For example, after completing a history and examination of a patient with neck pain, the patient has 1) some sort of trauma to the neck (either cumulative or frank trauma), 2) pain with motion of the neck, 3) palpation tenderness of the neck musculature, and 4) hyper-tonicity of the muscles of the neck, using Table 1, all the elements for Cervical Sprain / Strain are met. Therefore, this becomes your working diagnosis.

However, if one notices that the diagnosis of Intervertebral Disc Syndrome (IVD) without myelopathy, has many of the same findings as sprain/strain except it also has 1) Positive CT or MRI, 2) Positive orthopedic compression test disc herniation, 3) May

include sensory changes, antalgic posture, reflex changes or muscle strength changes and this patient had positive orthopedic compression tests but the radiologist's interpretation of the MRI are pending, this diagnosis would be a differential or a Rule Out (R/O). This is because many of the elements of the IVD Syndrome are met but not all in order to use this diagnosis.

Example: A patient who has 1) injury to the neck, 2) pain on motion especially with extension, 3) palpation tenderness of the neck muscles, and 4) neck muscle spasms. All the elements of **BOTH** diagnoses of Cervical Sprain Strain and Facet Syndrome have been met.

Traditional Asian Medicine Diagnosis

If after completing the history, examination and evaluating all the data available, it is determined the patient's condition appears to be originating from a musculo-skeletal origin -- the best Asian medicine diagnostic model to use is Differentiation of Syndromes According to the Eight Principles. (Exterior/Interior, Hot/Cold, Yin/Yang, and Deficient/Excess). Also consider Six Exogenous Factors (Wind, Cold, Summer heat, Damp, Dryness and Heat (fire, mild heat)).

A common error by practitioners treating musculo-skeletal conditions is to try and plug the patient's chief complaint into the diagnostic model of Zang-Fu, Five Elements, Shang Han Lun, Wen Bing, etc. These models are best used with internal medicine type conditions, not musculo-skeletal conditions.

For example, in the recent onset of neck pain, the patient will have 1) trauma to the area, 2) palpation tenderness, 3) pain with motion, and 4) local spasm or hyper tonicity.

The ICD-9 diagnosis would be sprain/strain of the cervical spine. In terms of Traditional Asian Medicine the area would also be examined to determine if there is heat at the injury site, local swelling (damp to shut down the heat), if the palpation makes the pain better (deficient) or worse (excess), etc. In the case of a recent injury with swelling and heat where palpation increases the pain, the Traditional Asian Medicine diagnosis is Superficial Damp with Deep Heat, Excess Condition.

If for example the palpation made the area feel better and there was no longer damp or heat, the ICD-9 diagnosis would still be cervical sprain/strain but the Traditional Asian Medicine diagnosis changes to Deficiency with insufficiency of Qi and blood.

Both are correct when viewed within each paradigm but do not correlate directly with each other due to the differences between the models.

**Table 1: Common Musculo-skeletal History, Examination and Laboratory/Diagnostic Imaging Needed to Determine a Diagnosis
(NOTE: This is not a complete list of diagnoses)**

What is the minimum to be present in order to arrive at an ICD-9 diagnosis? All elements of the diagnosis have to be met in order to use it. Otherwise, if some but not all of the elements are present, then the diagnosis is a rule out or a differential diagnosis. This is not an all inclusive list of diagnoses but is a good start for any provider for treatment of musculo-skeletal conditions.

- 1. Sprain and/or Strain**
Pain in the body area
Affected joint has painful movement
Spasms or hypertonicity of the muscles in the body area
Palpation tenderness
History of trauma or insult to the body area

- 2. Intervertebral disc without myelopathy**
Pain in the body area
Affected joint movement painful and/or increases symptoms
Positive CT or MRI
Positive orthopedic compression test disc herniation
(Valsalva's, Spurling's, Compression Test, Kemp's, SLR, Lasegue's Test, etc.)
May include sensory changes, antalgic posture, reflex changes or muscle strength changes.
Palpation tenderness of the affected body area
Spasms or hypertonicity of the body area

- 3. Myalgia and Myositis**
Tenderness either latent or active in the involved muscles
Circumscribed palpable nodule (trigger point)

- 4. Headache - symptoms involving the head and neck**
Head pain
Tenderness by palpation in the head, suboccipital region, cervical or para-cervical areas.

- 5. Brachial neuritis or radiculitis**
(Includes cervical radiculitis and radicular syndrome of upper limb)
Pain and/or parenthesis in the neck, shoulder, arm and/or hand
Weakness of the arm and/or hand
Arm symptoms aggravated by neck and/or arm movements

- 6. Brachial plexus lesions**
(Includes cervical ribs, costoclavicular, scalenus anticus and thoracic outlet syndromes)
Tenderness at the supra-clavicular and/or lateral aspects of the lower cervical spine
At least one of the following is positive
 - Adson's Test
 - Wright's Test
 - Costoclavicular Test
 - Hyperabduction Test

- 7. Acute acquired torticollis**
Neck pain
Affected cervical joint movement is painful
Head tilt is present
History of trauma or insult to the cervical region
Tenderness by palpation of cervical muscles including the trapezius and sternocleidomastoid muscle

- 8. Facet syndrome**
Subjective localized spinal pain
Spasm or hypertonicity of the paraspinal region (especially with weight bearing)
Extension of affected area causes pain
History of trauma or insult to the region

- 9. Cervical-Cranial syndrome**
History of trauma involving the cervical spine
Suboccipital pain
Vertigo
Tinnitus
Visual disturbances and/or general fatigue are also present

- 10. Migraine, classical**
Aura consisting of at least one of the following:
 - Visual disturbance (blurred or cloudy vision)
 - Numbness or weakness of one side of the body
 - Transient aphasia
 - VertigoUnilateral head pain (throbbing)
Nausea and/or vomiting

- 11. Common migraine (atypical or sick headache)**
Unilateral or bilateral head pain
Pain in the eye (stabbing)
Often aggravated by light or noise

- 12. Thoracic neuritis or radiculitis, unspecified**
Radicular symptoms into the flank or intercostal areas
Tenderness by palpation in the thoracic spine or adjacent areas
- 13. Anterior Scalene Syndrome (Thoracic Outlet Syndrome)**
Pain in fingers, hand, forearm, arm and even shoulder
Positive Adson's sign or brachial plexus compression test
Hypertonicity or spasm of the anterior scalene muscle
- 14. Costoclavicular Syndrome**
Pain in fingers, hand, forearm, arm and even shoulder
Radial pulse weakens or disappears when the patient thrusts the chest forward and pulls the shoulders posteriorly and anteriorly
- 15. Hyperabduction Syndrome**
Pain, paresthesia and numbness in the hand
Radial pulse weakens or disappears when the patient's arm is abducted to 180 degrees
- 16. Sciatica**
Buttock and/or lower limb pain distribution
Positive SLR at 30 to 70 degrees
Low or absent DTR (Achilles)
- 17. Sacroiliac sprain/strain**
Pain in the sacroiliac joint
Affected joint movement is painful
Tenderness on palpation
History of trauma or insult to the sacroiliac region
- 18. Rib sprain/strain**
Pain in the Thorax
Pain upon inspiration
Tenderness by palpation over the involved area
History of trauma or insult to the thorax
- 19. Piriformis Muscle Syndrome**
Pain and parenthesis along the sciatic nerve
May have burning sensations, Hyperesthesia, or anesthesia
May have motor weakness of hip external rotation
Sciatic notch tenderness with palpation
Palpable mass or swelling over the Piriformis muscle with exacerbation of pain
Increased pain with internal rotation of the hip
Decreased pain with external rotation of the hip

20. Iliacus Muscle Syndrome

With high lesions, patients have difficulty standing from a seated position

Weakness of the iliopsoas muscle

With low lesions, patients have difficulty extending their knee

Increased pain with hip extension

Patellar reflex typically disappears

Sensory disturbances throughout the femoral nerve's dermatome

21. Thoracic neuritis or radiculitis, unspecified

Radicular symptoms into the flank or intercostal areas

Tenderness by palpation in the thoracic spine or adjacent areas