

CHAPTER 7

Consultation, History and Examination

Chapter Outline

- I. Overview
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I. OVERVIEW

The primary objective of a chiropractic practice is to detect, analyze, control, reduce and correct a patient's vertebral subluxation(s) and other malpositioned articulations and structures in the safest and most efficient manner possible. The chiropractic profession recognizes patient safety as being paramount.

The purpose of this chapter is to act as a guide to the practitioner of Chiropractic. It is understood that the taking of a case history and the performing of an examination is a component part of the chiropractic practice

The chiropractic case history and examination are concerned with the accumulation of information pertinent to the location and analysis of vertebral subluxation(s) and other malpositioned articulations and structures, in the context of the patient's general health status. Doctors of chiropractic accept the responsibility to recognize and deal with emergencies as defined by the International Red Cross. They also accept the responsibility to inform the patient of any significant clinical findings.

In order for the doctor of chiropractic to initially determine the presence, duration, location and type of subluxations present, and to determine whether the patient is suited for certain types of chiropractic techniques, it is necessary to gather data relative to the patient's health history and stated concerns. This information will also serve as a basis for wellness counseling and lifestyle advice. This data is collected during the patient's initial consultation and examination.

The doctor of chiropractic can begin to interpret the chiropractic needs of the patient following the initial examination and case history which might produce salient points relative to the patient's spinal and general health that may lead the doctor of chiropractic to alter the evaluation of the patient. The doctor's findings during the initial case history and examination will establish an initial course of care which will be recommended to the patient.

The doctor of chiropractic should inform the patient during the consultation as to the objective of chiropractic care and of the doctor's responsibility.

II. LIST OF SUBTOPICS

A. History

1. General Considerations
2. Components
3. Reason for seeking Chiropractic care.
4. Onset and duration of symptomatic problem, if one exists. This includes determination of the character and location of subjective symptoms (if they exist); and aggravating/relieving factors (only relevant if symptoms exist). In addition, this element includes:
 - a. Medical
 - b. Chiropractic
 - c. Self
 - d. Other
5. Prior care
 - a. Medical
 - b. Chiropractic
 - c. Self
 - d. Other
6. Family history

7. Past health history
8. Occupational history
9. Social history (smoking, drinking, sports, etc.)

B. Examination Procedures

1. Review of systems
2. Use of analytical procedures
3. Use of physical examination procedures may be used to locate and document vertebral subluxation and other malpositioned articulations and structures
4. Use of laboratory and physical examination procedure to determine altered body functions.
5. Use of physical examination procedures may be used to classify vertebral subluxation and other malpositioned articulations and structures
6. Use of physical examination procedures to locate and classify vertebral subluxation and other malpositioned articulations and structures may reveal contraindications.
7. In presence of head complaints
8. Neck and adjacent structures
9. Thoracic structures and/or chest structures
10. Lower back and adjacent structures
11. Extremity structures
12. Independent chiropractic examinations

III. LITERATURE REVIEW/DOCUMENTATION

History taking and patient examination are based on principles of elucidating information relative to the patient's health status.

Specific literature on the appropriate history and examination techniques for the chiropractic practitioner can be found in numerous texts. The reader is directed to those texts listed in the bibliography for detailed description of such techniques. The intent of this chapter is not to serve as a teaching tool. Rather, the purpose is to assist in establishing guidelines related to acceptable history techniques to be used by the practitioner.

Many journals published for the chiropractic profession, including the *Journal of Manipulative and Physiological Therapeutics*, *Chiropractic Technique*, *Chiropractic Research Journal*, *Journal of Vertebral Subluxation Research* and *Chiropractic Sports Medicine*, provide articles on the appropriateness of various examination procedures, but there is little information in history taking procedures. The articles range from describing the measurement of lumbar range of motion to objectively measuring the strength of the biceps muscle. These articles often reflect only one individual's perspective. These considerations increase our need for objective information gained from well-designed research projects.

The history-taking procedure has been considered the most clinically sophisticated and complex task used by health care providers. Its purpose is to provide the clinician with one or more diagnostic impressions. These are then confirmed or altered following the judicious selection of additional tests -- and it can be noted in the literature that this process does indeed occur. One study determined that a sample group of practitioners determined their first hypothesis regarding the diagnosis of a random sample of patients an average of 28 seconds after hearing the chief complaint.

The correct hypothesis (which was identified in 75% of these cases) was found on average within the first six minutes of a half-hour workup. Much of the information that will lead a clinician to a management plan, then, is gained very early in the doctor/patient interaction.

Sandler also emphasized the importance of the history. He found that the percentage of diagnostic completion was as high as 73% after the history and physical examination alone. He suggested that further tests were often unnecessary and costly. Cutler stated that 70%-90% of diagnoses are derived from the history alone. The art and skill of the doctor in the history taking process includes the ability 1) to obtain an appropriate description of the patient's complaints; 2) to elicit data vital of the case that may not have been volunteered, and 3) to know that the patient does not have clinically relevant factors that are left unmentioned.

These skills can be diminished in a number of ways. Previous experience, while of great value, may result in the clinician prejudging a patient's condition, coming to a conclusion too quickly. This may result in unnecessary testing procedures in order to determine that the hypothesis made during the history is incorrect, or may result in an appropriate confirmatory test not being used and the patient being treated inappropriately. Further the meaning of words used by the patient may not be the same as that of the practitioner. "Night pain," for example, may signify a pain when resting in bed which has high sensitivity (greater than 0.90) for the detection of malignancy; or it might mean that the patient wakes up whenever he/she rolls over and that the movement irritates an inflamed facet. A practitioner's arbitrary use of professional jargon, and the assumption that the patient understands it, can lead to further confusion. All of the above are further complicated when the first language of the clinician is not the same as that of the patient. It is perhaps for these reasons that the accuracy of patient histories has been questioned, and significant variability noted.

Mishler et. al. state that there are three parameters involved in the interview process: attentiveness, facilitation and collaboration. Attentiveness is defined as the degree to which the practitioner takes the patient's concerns seriously. Facilitation is the encouragement given by the clinician to allow patients to tell their own stories in their own words, and collaboration is the degree to which patients are considered partners in the process by which they receive care.

The literature is sorely lacking with respect to controlled randomized clinical trials directed at measuring reliability and validity of specific history taking procedures. A thorough review of practitioner reliability studies performed by Koran did not include any studies relating to history taking. Earlier studies, in which practitioners interviewed different samples of patients drawn from one population, found considerable disagreement in symptom prevalence rates.

While the chiropractor's history taking is broad and general, the examination is quite specific and relates to procedures which give information, either directly or indirectly, relative to the location and classification of vertebral subluxation(s) and other malpositioned articulations and structures.

While vertebral subluxations and other malpositioned articulations and structures may be asymptomatic it is known that they commonly have peripheral physiological effects. Therefore, the examination, although heavily concentrated on the spine may include procedures remote from the spine including ,but not limited to other physical examination procedures, clinical laboratory and imaging procedures.

Palpation is an intrinsic part of chiropractic. Utilization of this procedure should help the examiner to detect abnormalities and therefore develop a more thorough assessment of spinal function. Chiropractic colleges place palpation techniques high on their curricular agendas. Standardized training and protocol for palpation is necessary and should be promoted by the colleges to help improve inter-examiner reliability.

The biological/diagnostic sciences, are aids to the decision-making process. This process, however, must take place within the social context of our society. As a result a social interactive component must be recognized and taken into account in order to make appropriate choices during the physical examination and any additional testing procedures.

There are several examination styles that are currently recognized. Not all of them are practical in a clinical setting. One is the exhaustive approach, with the completion of a comprehensive series of all tests that may significantly contribute to determining the diagnosis. A study by Durbridge, performed in a hospital setting, showed that exhaustive testing produced no improvement in mortality rate, morbidity, duration of monitoring, disability, medical opinions of the patient's progress or length of stay.

Another style, the one generally used to obtain the history and perform the physical examination, is the hypothetic-deductive approach. This consists of generating one hypothesis after hearing the patient's chief complaint(s), or several possible working hypotheses. The practitioner then attempts to gather historical and physical information to either support or refute the potential working hypotheses. The goal is to narrow the number of working hypotheses to one.

The physical examination, while apparently objective, is no less riddled with social issues than the history. It has been noted that the assessment of the observer, instructions given to the patient, and sincerity of response are important. When, for example, an almost 30% difference is found in the sensitivity of a test such as sensory loss used to help diagnose a herniated lumbar nucleus pulposus for two different samples, it is difficult to know if the difference lies in the test itself or in the doctor-patient relationship. The more motivated patients are, the more likely they are to fairly represent their maximum capacity on a physical performance test. The less anxious patients are, the more likely they are to reach forward despite their pain.

Cooperman et al attempted to assess inter-tester and intra-tester reliability and validity of Lachman's test in determining the integrity of the anterior cruciate ligament (ACL). They found the test judgments had limited reliability. They were more reliable for predicting absence of ACL injury than the presence of ACL injury.

Another study analyzing a sample of patients with objectively determined anterior cruciate ligament test or chondral damage found patients were not correctly diagnosed using a battery of usual orthopedic tests. Under anesthesia, however, Lachman's test proved to be highly sensitive and specific. This suggests that even in the face of well-performed maneuvers, compensatory defense reactions from soft tissue may prevent stressing the targeted tissues in the manner necessary for adequate diagnosis.

Mieraue et. al. determined that the correlation between straight leg raising (SLR) and low back pain may be poor when evaluating children and adolescents with the exception of male adolescents with a history of low back pain. When evaluating various populations it has been observed that ipsilateral SLR is a highly sensitive indicator (72%-97%) of lumbar disc herniation, and contralateral SLR is highly specific for the same condition (88%-100%).

Brunarski evaluated two physical measurements, plumblines analysis and lateral bending dynamic roentgenograms. These two measures demonstrated greater predictive value and accuracy in differentiating patients with myofascial pain from asymptomatic patients than sacroiliac motion palpation and straight leg raising.

LeBoeuf evaluated eight different orthopedic tests and found that only one (heel to buttock

test) had predictive value for low-back pain. Orthopedic tests that appeared to strain several adjacent anatomical structures were commonly positive. This may indicate that these tests have poor discriminative ability.

Three common cervical orthopedic tests used to determine the presence of cervical disc disease were evaluated as they related to radicular, neurologic and radiologic signs. Neck compression, axial manual traction and shoulder abduction tests were found to be highly specific for radicular pain, neurologic and radiologic signs. Despite their low sensitivity, these tests were deemed valuable in the clinical examination of a patient with neck and arm pain. In the presence of a negative finding from an accepted test, a practitioner needs to recognize that many tests have low sensitivity.

In conclusion, much of the basis of history taking and performing a physical examination stems from clinical experience rather than scientific data.

This experience first starts at the college level with a good understanding of the basic sciences and later through clinical experience under the tutelage of experienced practitioners in the college clinic. After graduation the practitioner will continue to gain experience through practice, continuing education programs, and consulting with other practitioners.

As clinicians we must remain flexible in our approach to the patient, and recognize consultative procedures that may assist in establishing an effective working diagnosis.

IV. RECOMMENDATIONS

A. History

1. Recording the case history is necessary for the practitioner to determine the overall health status of the patient and give a better understanding of the patient's concerns.

7.1.1. **Rating:** Strong positive recommendation
Evidence: E, L

2. The history generally include basic information such as age, sex, and other pertinent information depending on the situation and the chiropractor's judgment.

7.1.2. **Rating:** Strong positive recommendation
Evidence: E, L

3. The chiropractor should establish the reason(s) for the patient seeking chiropractic care.

7.1.3. **Rating:** Strong positive recommendation
Evidence: E, L

4. The process by which one determines the diagnosis should be adequately recorded and interpretable.

7.1.4 **Rating:** Positive recommendation
Evidence: Class II, III

5. The history plays a critical role in the diagnostic process. A well performed history will appropriately identify the region to be examined and the extent of the condition.

7.1.5. **Rating:** Established
Evidence: Class I, II, III

6. The components of the history may include any or all of the following, dependent on the presentation of the patient and the judgment of the practitioner.
- a. Data on identity, including age and sex.
 - b. Chief complaint (problem list)
 - c. History of present complaint
 - History of trauma
 - Description of chief complaint(s)
 - Quality/character
 - Intensity
 - Frequency
 - Location and radiation
 - Onset
 - Duration
 - Palliative and provocative factors
 - d.. Family history
 - A family history including information of relatives known to have had the same problem(s) and cause of parents or siblings death and age at death.
 - e. Past health history
 - General state of health
 - Prior illness/Disease history
 - Surgical history
 - Previous injuries, i.e. MVA, workers' comp.
 - Past hospitalizations
 - Previous care and diagnostic tests
 - Medications
 - Allergies
 - f. Psycho-social history
 - Occupation
 - Activities
 - Recreational activities
 - Exercise
 - g. Social history
 - Marital status
 - Level of education
 - Social habits
 - h.. Review of systems
 - Musculoskeletal
 - Cardiovascular
 - Respiratory
 - Gastrointestinal
 - Genitourinary
 - Central nervous system
 - Eye, ear, nose and throat

Endocrine
Peripheral vascular disease
Psychiatric

7.1.6. **Rating:** Necessary
Evidence: Class I, II, III

B. Examination

1. Analytical procedures used by Chiropractors to classify and document vertebral subluxation and other malpositioned articulations and structures should be consistent with applicable state law.

7.2.1. **Rating:** Strong positive recommendation
Evidence: E, L

2. Practitioners may use any or all evaluative procedures pertinent to the physical examination, however sophisticated, dependent on individual training and the legal statutory framework within which they work, and clinical need.

7.2.2. **Rating:** Necessary
Evidence: Class II, III

3. Examination procedures regardless of chief complaint(s) may include:

- a. Examination for vertebral subluxation
- b. Evaluation of blood pressure and pulse rate
- c. Recording of height and weight
- d. Record of temperature in the presence of pertinent subjective complaints

7.2.3. **Rating:** Recommended
Evidence: Class III

4. When evaluating the head, evaluation may include examination of the neck and adjacent structures as well as appropriate vascular and cranial nerve testing.

7.2.4. **Rating:** Established
Evidence: Class II, III

5. Examination of the neck and adjacent structures may include:

- a. Inspection and observation to include postural presentation of the region
- b. Regional palpation
- c. Range of motion including active and/or passive movement
- d. Muscle strength
5. Provocative maneuvers which might include compression and stretching
6. Neurologic examination
7. Vascular examination

As is safe and effective in evaluating the patient.

7.2.5. **Rating:** Established
Evidence: Class II, III

6. Examination procedures for thoracic and/or chest structures may include:
- a. Inspection and observation to include postural presentation of the region
 - b. Regional palpation
 3. Auscultation of the chest in the presence of pertinent subjective complaints to be performed by the practitioner or appropriate specialist
 4. Auscultation of heart sounds in the presence of pertinent subjective complaints to be performed by the practitioner or appropriate specialist
 5. Auscultation and palpation of the abdomen
 6. Range of motion including passive and/or active movements
 7. Muscle strength
 8. Provocative maneuvers which may include compression and stretching
 9. Neurologic examination

As is safe and effective in evaluating the patient.

7.2.6. **Rating:** Established
Evidence: Class II, III

7. Examination procedures for lower back and adjacent structures may include:
1. Inspection and observation to include postural presentation of the region
 2. Regional palpation
 3. Evaluation of the abdominal aorta to include palpation and auscultation in the presence of pertinent subjective and objective findings
 4. Evaluation of the abdominal/pelvic viscera to include palpation and/or auscultation in the presence of pertinent subjective complaints
 5. Range of motion including passive and/or active movements
 6. Muscle strength
 7. Provocative maneuvers which may include compression and stretching
 8. Neurologic examination
 9. Vascular examination
 10. Recording the circumference of the involved extremity in the presence of pertinent subjective complaints as is safe and effective in diagnosing the patient.

7.2.7. **Rating:** Established
Evidence: Class II, III

8. Examination procedures for extremity structures may include:
- a. Vascular examination
 - b. Neurologic examination
 - c. Regional palpation
 - d. Range of motion including passive and/or active movements
 - e. Provocative maneuvers which may include compression and stretching
 6. Recording the circumference measurements of the involved extremity in the presence of pertinent subjective complaints.

As is safe and effective in evaluating the patient.

7.2.8. **Rating:** Established

Evidence:

Class I, II, III

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