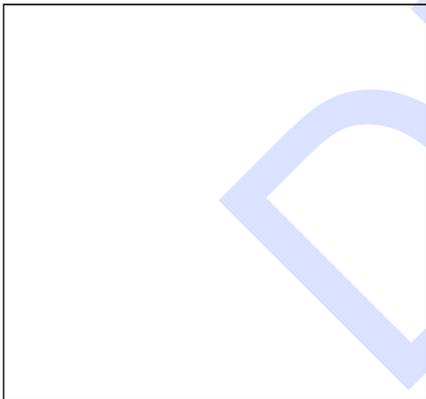


Part 1: Chapter 2

Systemic Clinical Osteopathically Integrated Learning Scenario:

Patient With Depression



Description

This Clinical Osteopathically Integrated Learning Scenario (COILS) focuses primarily on the palpatory evaluation and supportive osteopathic manipulative treatment for a patient suffering from depression.

The COILS is divided into two sections:

Section One

The **Roundtable Discussion Workshop** includes a discussion and evaluation of the patient's case history, diagnosis, pathophysiology, osteopathic principles involved, functional anatomy, treatment options, contraindications, and (if time permits) a demonstration of manipulative treatment techniques applicable to the patient's homeostatic needs.

Section Two

The **Patient-Based Application Workshop** is the supervised application of manipulative treatment techniques for a patient with this diagnosis. This workshop is designed to evaluate the student's or physician's diagnostic and psychomotor skills when providing an osteopathic manipulative treatment for an actual (or simulated) patient.

If time permits, the instructor may deliver this entire two-section program at one time. Ideally, however, Section One should be taught several days before Section Two to allow the student or physician to review and practice appropriate techniques. If an actual patient is not available for Section Two, a simulated patient may be used.

I. Description

This section is a roundtable-type presentation and discussion regarding the osteopathic approach to the treatment of a patient with depression.

II. Cognitive Components

A. Case Presentation

A 36-year-old female complains of feeling “blue” for the last three months. The patient reports a lack of interest in her usual activities. She reports frequently crying spells without a reason that she can identify. She complains of, excessive daytime sleepiness and notes that she has been eating more despite a decreased appetite. The patient denies any significant life events. The patient is working and caring for her children. The patient denies drug and alcohol use does not smoke and has no suicidal ideation. The patient does have a history of preeclampsia.

The patient states that she lost 3 pounds over the past few months without trying and not wanting to lose weight. She works in an office and doesn’t want to talk about work. She has also become quite agitated with family members who are becoming increasingly intrusive into her life.

The patient is single without any children, and denies a family history of depression. She said that the pain isn’t physical, but it is real.

Physical Examination

Vital Signs: Temperature, 98.1; Heart Rate, 72, Respiratory Rate, 14; Blood Pressure, 102/64 Height: 5’2” Weight 136 lbs

General: No acute distress; alert and oriented; affect is muted

Head: Normocephalic; atraumatic; dry and brittle hair with general hair thinning noted

Ears: Pinna are normal externally, Tympanic Membrane are intact, cone of light is present bilaterally

Eyes: Pupils equal, round, reactive to light and accommodation; external ocular muscles intact; funduscopic exam without papilledema, hemorrhages or exudates

Nose: Nares are patent without nasal septal deviation; pharyngeal mucosa pink and moist

Throat: No cervical bruits, no lymphadenopathy, thyroid not palpable enlarged

Oral: Moist without any loss of teeth, no erythema, exudate or edema of the pharynx

Cardiac: Regular rate and rhythm; no rubs, clicks or gallops

Lungs: Clear to auscultation bilaterally

Abdomen: Soft, nontender, bowel sounds present in all four quadrants.

Extremities: No cyanosis, clubbing or edema

Neuro: Cranial nerves II-XII grossly intact; negative Romberg’s; no problem with rapid alter-

nating motions; no motor or sensory deficit, DTRs intact and symmetric, Babinski's test elicits plantar flexion and down going toes bilaterally

Diagnostics

CBC: mildly decreased hemoglobin; hematocrit with slightly microcytic indices; electrolytes normal
TSH: normal
EKG: NSR without any signs of ischemia, no ST-T wave abnormality
CT brain: skull without fracture, no hematoma noted.

Osteopathic Structural Examination

Cranial: SBS compression with a CRI of 6/minute.
Cervical: Bogginess in the suboccipital region, OA ES_LR_R, C7 ER_RS_R.
Thorax: T1 NS_RR_L, Rib1 Left superior shear, T-L Jct NS_RR_L.
Lumbar: L5 NS_LR_R, increased lumbar lordosis.
Sacrum: Trace presacral edema, +R seated flexion test, deep sulcus R, posterior/inferior ILA L, (-) spring test.

A. Pathophysiology

1. 1. The standard mnemonic device to recall and assess the presence and degree of depression is "SIG-E-CAPS":
 - Sleep: changes in sleep- increase during day or decreased at night
 - Interest: loss of interest in preferred activities
 - Guilt: devalue or low self-worth
 - Energy: excessive fatigue
 - Concentration: difficulty concentrating or remembering events
 - Appetite: loss or increased
 - Psychomotor: agitation, anxiety or lethargic
 - Suicidal or preoccupation with death
1. 2. There are several forms of clinical depression:
 - Major depressive disorder, or major depression: This form characterized by five of the above symptoms present every day during the same two weeks period and may include manic episodes. The symptoms should be disabling and prevent patient from normal function. The episodes maybe recurring throughout lifetime.
 - Dysthymic disorder, or dysthymia: This form is characterized by a long-term (two years) occurrence of the above symptoms for most of the day, but without suicidal thoughts. The patient is able to function but not at normal level. The patient often reports "not feeling well". The patient has never experienced a manic episode. Episodes major **depression** of may occur throughout lifetime.

- Minor depression: This form is characterized by having the above less than five symptoms for two or more weeks. Patients with this form are more likely to be diagnosed with major depression if not treated early.

1. Laboratory test can rule out an underlying medical condition that may be contributing to the depression symptoms. Further, neuroimaging diagnostic testing can clarify the nature of the illness and rule out organic causes. A recent study by Ali Saffet Gönül, MD found that patients with major depression have significantly lower regional cerebral blood flow in the left and right superior frontal cortex, and left anterior cingulate cortex.

C. Functional Anatomy

1. Decreased cranial motion has been reported in patients with depression and other psychological disturbances.
2. Patients suffering from depression and other psychological disturbances have shallow and rapid breathing causing a dysfunction of the respiratory-circulatory system to effectively return lymph to the central circulation and venous blood to the heart.
3. CNS has a valveless venous plexus and any passive congestion can compromise the CNS circulation and lead to the accumulation of waste products in the CNS.
4. Studies have shown the complex interplay of psychological state and neuro-endocrine-immune function. This includes alterations in rates of healing, immune function and autonomic tone during times of psychological disturbance. This provides rationale for efficacy of OMM/OMT in the treatment of psychiatric disturbances. OMM/OMT with an emphasis on improving respiratory-circulatory efficiency and decreasing sympathetic hyperactivity can be used as an adjunct to counseling and pharmacotherapy.

D. Goals for Osteopathic Manipulative Management

1. OMM/OMT does not address the primary issues in a patient with depression.
2. OMM/OMT should be used in conjunction with allopathic therapies to engage the patient in a therapeutic process where the depression is being treated. Patients feel more comfortable receiving care for the viscerosomatic issues secondary to depression, than they will receiving psychiatric therapy or medications. OMM/OMT as an adjunct therapy can give short term relief of somatic issues that accompany depression.

E. Contraindications and Cautions Regarding Treatment

See contraindications to treatment, *Foundations*, pp. 1015-1024.

F. Instructor's Notes

Personal clinical pearls and lessons learned from previous COIL presentations.

III. Psychomotor Components

1. Fatigue and lack of energy are present in 73% of patients with depression.
2. Musculoskeletal pain and low back pain are often the presenting complaints in a patient with depression.
3. Abdominal pain and headache are other somatic complaints that may have their origin in a patient's depression.
4. Diarrhea, excessive sweating, and psychomotor retardation common symptoms that can be directly related to depression, although patients are often reluctant to accept this information.

IV. References

Gonul AS, Kula M, Bilgin AG, Tutus A, Oguz A. The regional cerebral blood flow changes in major depressive disorder with and without psychotic features. *Prog Neuropsychopharmacol Biol Psychiatry*. 2004 Sep;28(6):1015-21.

Lecrubier Y. Physical components of depression and psychomotor retardation. *J Clin Psychiatry*. 2006;67 Suppl 6:23-6.

Plotkin BJ. Adjunctive osteopathic manipulative treatment in women with depression: a pilot study. *J Am Osteopath Assoc*, 2001 Sep;101(9):517-23.

Slick, G. In: Ward RC, Ed. *Foundations for Osteopathic Medicine*. Baltimore, MD: Williams & Wilkins; 1997; 107-131, 157, 207-209.

Sugahara H, Akamine M, Kondo T, Fujisawa K, Yoshimasu K, Tokunaga S, Kudo C. Somatic symptoms most often associated with depression in an urban hospital medical setting in Japan. *Psychiatry Res*. 2004 Oct 30;128(3):305-11.

Willard, F. The Nervous System: Hypothalamus. From educational materials presented as part of lecture series; 1998; (19 pages).

Zink G, Lawson W. An osteopathic structural examination and functional interpretation of the soma. *Osteopathic Annals*, 1979 Dec 7(12):433-440.

V. Examination Questions

This involves answering multiple choice questions regarding treatment for a patient with depression. (* denotes answer)

1. Depression is associated with:
 - a. An emotionally state with little effect on the physical functioning of the body.
 - b. Emotional and physical symptoms that are clearly aligned in scope and severity
 - c. Emotional symptoms and physical symptoms that may or may not be aligned temporary or in severity. *
 - d. Physical symptoms will always precede the emotional symptoms.

2. Osteopathic cranial findings include:
 - a. Decrease in the cranial rhythmic impulse
 - b. SBS Compression
 - c. Bogginess of the cervical spine
 - d. All of the above *
 - e. There are no clear cranial findings in patients with depression

3. Patients with depression should always be treated with OMT
 - a. True
 - b. False *

4. Somatic symptoms noted in depression include:
 - a. Diarrhea
 - b. Excessive sweating
 - c. Low back pain
 - e. Headache
 - f. All of the above *

5. Depression can effect:
 - a. Immune Function
 - b. Autonomic control
 - c. Thyroid function
 - d. A and B are correct *
 - e. A, B and C are correct

Section Two: Patient-Based Application Workshop

I. Description

This is the practical application of osteopathic treatment techniques to support the patient with a headache.

II. Psychomotor Components (Refer to Section One for regions of the body that are involved.)

1. Examination of the patient using TART, including postural screen, palpation, segmental motion testing and diagnosis of somatic dysfunction.
2. Application of philosophy and treatment technique.
3. Reevaluation of the patient after treatment is completed to assess result. If a simulated patient is used, then the student/physician should verbalize length of treatment and future treatment goals.

III. Cognitive Components

1. Documentation in the medical record.
2. Post-treatment discussion.

Note: It is recommended to use the standardized outpatient form included in each of these chapters for documentation.

DRAFT

Physician: _____ Date: _____

Title: Resident (Specialty) _____

Intern OMS III OMS IV

Critical Actions Evaluation Checklist of Osteopathic Principals Applicable to a Patient with a Headache

CRITICAL ACTION	COMPLETED		COMMENTS
	Yes	No	
Become familiar with the patient's history physical examination findings, laboratory and other diagnostic findings.			
Perform an osteopathic structural examination.			
Determine significant areas of somatic dysfunction.			
Determine body region(s) to be treated with OMT.			
Apply OMT to at least the body region determined to be the most in need of treatment at present time.			
Treat other significant somatic dysfunctions if feasible.			
Document treatment and immediately observable effects.			

Trainer: _____