**OPP Board Review for AOBFP Certification**

**February 6, 2013**

8:00-9:00 am webinar

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**Goals of Webinar**

- To help you to better understand the AOBFP certification exam structure in regards to OPP questions, the cognitive assessment, and practical performance evaluation.
- To help you to create an individualized study plan and strategy to maximize your exam and performance evaluation scores.
- To give you commonly referenced areas to review in regards to OPP cases and board test questions.

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**AOBFP Certification Exam Structure**

- The AOBFP Certification Exam is composed of two types of testing taken at two different test sites (and on two different dates).
  - The cognitive assessment computer-based examination
  - The practical performance evaluation

*Please note that you must register for these examinations approximately 6 months in advance.*

http://www.aobfp.org/home.html
The Cognitive Assessment Computer-Based Examination

- This is a full day examination taken at regional testing sites made available by Pearson VUE, the AOBFP’s test vendor.
- The complete examination consists of 400 multiple-choice questions in the following content areas: Addiction Medicine, Adolescent Medicine, Behavioral Sciences, General Medicine, Geriatrics, Surgery, OB/Gyn, Pediatrics, Sports Medicine, and Women’s Issues.
- 5%, or about 20 questions, are specific to OPP (which fall under the General Medicine category).

The Practical Performance Evaluation

- This evaluation is taken at one of the national convention sites (either the Spring ACOFP or Fall AOA OMED conference).
- This practical is given over two consecutive days.
- This evaluation is written, oral, and practical.
- Each candidate will be assigned a partner who will act as a role of the patient during the examination.

The Practical Performance Evaluation continued...

- Upon entering the exam room, you will be given three (3) clinical cases and one (1) from each of the following areas: Spine, Extremities, and Systemic Diseases (i.e. asthma).
- You will have 20 minutes to review each of 3 cases, choose one best answer diagnosis from the four (4-5) multiple choice answers given, and plan your Osteopathic treatments for each case (this is done individually while sitting at a desk).
- Following that 20 minutes, you and your partner will go to the first of three separate exam stations.
The Practical Performance Evaluation continued...

At the Exam Stations

1. Your examiner will review your diagnosis and tell you if it is correct or not and then give you the correct diagnosis.
2. You will then be given 4 minutes in which to discuss landmarks and demonstrate appropriate OMT for your first case.
3. After your 4 minutes is up, your partner will have the same opportunity to discuss landmarks and appropriate OMT for his/her first case.
4. These procedures will be followed for the next 2 stations.

Practical Performance Evaluation continued...

(Scoring)

• Each case will be scored using the following criteria:
  – Diagnosis
  – Identification of landmarks appropriate to the techniques
  – Implementation and demonstration of appropriate techniques
  – Ability to discuss the techniques
• A candidate must receive a passing score on two (2) of the three (3) cases in order to pass the performance examination.
• One re-take exam is allowed if the candidate fails.

Practical Performance Evaluation continued...

(Scoring)

There are up to 8 points maximum given for each case.
• Each category is given 0, 1, or 2 points.
  – Diagnosis (note that the correct diagnosis is 2 points)
  – Identification of landmarks appropriate to the technique
  – Implementation and demonstration of the appropriate techniques
  – Ability to discuss each technique
• You need 5/8 points to pass each case (so you can still pass the case if you don’t get the correct diagnosis).
Practical Performance Evaluation continued...

(Scoring)

• If you fail, you will be retested in all three categories with the same exam protocols and grading system (usually during the same or the next day of testing).

• In the event of failure on the retake exam, the candidate must retake the performance evaluation at a future testing date.

Creating an individualized study plan & strategy to maximize your exam and performance scores

• Visit the Pearson VUE Regional Testing site prior to your exam date

• Review Materials ahead of time and Reduce your Anxiety
  — Use the blueprint items to study

• Practice answering OPP questions
  — Read the question, focus on the stem, read all answers before answering, find the best answer, and go with your “gut”
  — Draw pictures to help you visualize the answer
  — Review Dr. Sefcik’s ACOFP Board Review Test-Taking Skills “Guessing” tips
  • General Alternative, Longest Alternative, Grammar Agreement, Specific Determiners, Clang Association, and Deductive Approach
  — Review the correct explanations after doing the practice questions and before you score yourself

Creating an individualized study plan & strategy to maximize your exam and performance scores continued...

• Practice doing cases with a partner in a timed situation with colleague or faculty preceptor as the proctor
  — 20 minutes to review and diagnose 3 cases, 4-5 minutes per case at the table (for each partner)
  — Jot down thoughts of familiar techniques for you to use
  — Talk out loud as you examine and set up your partner
  — Note landmarks & explain the technique and theory behind it
  — Appear confident
    — Don’t talk about or perform techniques that you don’t know how to do
    — Don’t tell the examiner that you don’t usually do OMT
    — Don’t talk too much
    — Don’t hurt your partner
EXAMPLE CASE 1

» JP is a 42 year old female accountant who presents to the family practice clinic complaining of headache, fever, and a scratchy throat.

» Hx Cc: The last 4 days she has had a full feeling in her face, pressure behind her eyes, nasal congestion, sensitivity of her nose, pain in her upper teeth, and fatigue. At times she is sensitive to light and sound, and has a decreased sense of smell. A week earlier, she had a “cold” and she took OTC cold and sinus medications. These medications didn’t help very much and she is not getting better. The severity of her symptoms are 6/10, which is making it difficult to do her work.

EXAMPLE CASE 1 CONTINUED...

Physical Exam: T = 101.6 F  P = 90  R = 14/min  BP = 134/80  Wt = 140 #

+ General: Patient appears stated age and in no acute distress, other than fatigue
+ Skin: No color changes, rashes, changing moles, or edema
+ Eyes: Conjunctiva appears clear. Pupils are EERRA, EOMI. Fundoscopic exam with normal cup & disc, & vessels.
+ ENT: TMs are dull with a questionable cone of light. Erythema and generalized congestion of the nasal mucosa. Pustular drainage is noted and there is mild septal deviation to the left. BL frontal & maxillary sinuses are tender to palpation. Posterior pharynx is inflamed. Anterior cervical & posterior cervical lymphadenopathy to palpation.
+ Lungs: Clear to auscultation BL, no R/R/W
+ Cardiovascular: RRR with S1, S2 and no M/G/R

EXAMPLE CASE 1 CONTINUED...

» What is the best diagnosis?
  + A) Migraine Headache
  + B) Chronic Sinusitis
  + C) Acute Sinusitis
  + D) Upper Respiratory Infection
  + E) Tension Headache

» What landmarks are important to identify?

» What Osteopathic Manipulative Treatment Techniques should you use?

» Explain and demonstrate the techniques...
EXAMPLE CASE 2

MJ is a 52 year old female who is right-hand dominant, high level, tennis player, who seeks medical care following an injury of her right shoulder.

Hx Cc: She has had an acute exacerbation of chronic aching pain in her anterior/lateral right shoulder for the past 6 weeks, after participating in the Regional US Tennis Association event. The pain began while hitting multiple overhead strokes during a tournament. The pain did not improve after taking 1 week off of play, and now she is developing stiffness of the right shoulder which is affecting her daily activities. Her pain is a constant 5/10 in severity with a burning aching quality to the pain, and when she tries to reach overhead the severity increases to 7/10 in intensity. The pain also radiates to the right medial scapular boarder and down the biceps muscle anteriorly. She can’t sleep on her right side, hook her bra, or put a sweater on overhead without discomfort. She denies having neck pain or numbness and weakness of her right arm and hand. She has tried iced the shoulder and taking Naprosen twice a day without improvement.

EXAMPLE CASE 2 CONTINUED...

Physical Exam: T = 97.6 F  P = 78  R = 14/min  BP = 130/82  Wt = 138 #
- General: Patient appears younger than stated, A & O x 3, neatly groomed, and an excellent historian
- Skin: No color changes, rashes, changing moles, scars, or edema
- Eyes: PERRLA, EOM
- Neck: Neck full ROM without tenderness, lymphadenapathy, or thyromeathy
- Lungs: Clear to auscultation BL, no R/R/W
- Cardiovascular: RRR with S1, S2 and no M/G/R
- Neurological: 5/5 Motor BL upper & lower extremities, 2/4 Reflexes BL upper & lower extremities
- Musculoskeletal: 5/5 Motor BL upper & lower extremities, 2/4 Reflexes BL upper & lower extremities
- Right shoulder active abduction full, but painful arc from 50 degrees to full abduction, active external rotation limited to 20 degrees secondary to pain, active and passive adduction, flexion, extension and internal rotation full and pain free, Positive Empty Can Test, Negative Arm Drop Rest, Positive Crossover Test, Mildly Positive Neer’s Test, Positive A/C tenderness, Mildly Positive Yergason’s Test, Mildly Positive Speed’s Test, Negative O’Brien’s Test, No Gross Scapular Winging, Negative Tennis Elbow Test, Negative Tennis Elbow Test, Negative Phalen’s Test, No cyanosis, clubbing, or edema, and capillary refill is normal

EXAMPLE CASE 2 CONTINUED...

- What is the best diagnosis?
  - A) Right Supraspinatus Tear
  - B) Right Acronomioclavicular Strain
  - C) Right Biceps Tendonitis
  - D) Right Impingement Syndrome
  - E) Right Lateral Epicondylitis

- What landmarks are important to identify?

- What Osteopathic Manipulative Treatment Techniques should you use?

- Explain and demonstrate the techniques...
**EXAMPLE CASE 3**

- NG is a 35 year old male who presents to the family practice clinic complaining of constant low back pain that started after he lifted some boxes at work 2 days ago.
- Hx Cc: The patient was bending at the waist, heard a “pop,” and then felt pain in the low back. He had a hard time standing upright due to the pain in his back. The pain is a 7/10 in severity and is a little more on the right than the left. There is mild radiation of the pain to his right buttock, yet he has no numbness, tingling, weakness, bowel, or bladder problems. The quality of the pain is a constant throbbing pain that increases in severity and sharpness with bending or changing positions. He is having a hard time walking and can barely get into or out of the car. Rest and taking 600 mg of Advil help his pain decrease to a 4/10 in severity.

**EXAMPLE CASE 3 CONTINUED...**

- **Physical Exam:**
  - T = 98.6 F  P = 80  R = 16/min  BP = 128/78  Wt = 162 #
  - **General:** Patient appears stated age, alert, and in moderate distress due to the LBP
  - **Skin:** No color changes, rashes, changing moles, scars, or edema
  - **Neck:** Neck full ROM without tenderness, lymphadenopathy, or thyromegaly
  - **Lungs:** Clear to auscultation BL, no R/R/W
  - **Gastrointestinal:** Abdomen has bowel sounds in all 4 quadrants, there are no bruits, is non-distended, soft, non-tender to palpation without R/G/M
  - **Neurologic:** 5/5 Motor BL upper & lower extremities, 2/4 Reflexes BL upper & lower extremities
  - **Musculoskeletal:** Slow gait with decreased loading of the left lower limb; Decreased thoracic kyphosis and lumbar lordosis, with increased TMT in the right lumbar paravertebral muscle area especially in the area of L4-L5, decreased lumbar spine flexion (30 degrees) and extension (10 degrees), Moderate pain with lumbar extension, Straight Leg Raising Test causes increased LBP R/L and a tingling sensation, but no pain in the posterior legs or feet up to 50 degrees, negative FABERE Test BL, L5FRRSBR and the right piriformis is non-tender to palpation; negative BL knee testing

**EXAMPLE CASE 3 CONTINUED...**

- What is the best diagnosis?
  - A) Herniated Disc at L4-L5
  - B) Spinal Stenosis at L4-L5
  - C) Psoas Syndrome
  - D) Right Piriformis Syndrome
  - E) Right Facet Syndrome
- What landmarks are important to identify?
- What Osteopathic Manipulative Treatment Techniques should you use?
- Explain and demonstrate the techniques...
Example Question # 1

In a patient with low back pain, L5 is flexed and sidebent right. Which of the following is true?

A) You would expect L5 to rotate easily to the left, based on the laws of Type 2 spinal mechanics.
B) You would expect L5 to sidebend easily to the right, based on the laws of Type 1 spinal mechanics.
C) You would expect L5 to resist right rotation in the flexed position.
D) You would expect the right transverse process of L5 to become more posterior as you go from flexion to extension.
E) You would expect the sacrum to be rotated toward the left along the left oblique axis, if a torsion was present.

Example Question # 2

Manipulation of which spinal segments may decrease blood pressure by decreasing fluid retention? Think about Chapman’s Reflex Points.

A) C5-C7
B) T5-T9
C) T10-L1
D) T12 on the Right
E) L2-L5

Example Question # 3

You are consulted to see a severely debilitated 87 year old male with complaints of mid-thoracic pain. He was in the ICU for 3 weeks and was recently transferred to the Med/Surg floor. He has a history of COPD and prostate cancer with vertebral metastasis. Which osteopathic technique would be best suited for this patient?

A) Muscle Energy
B) Lymphatic Pump
C) HVLA
D) Articulatory
E) Indirect Myofascial Release
Example Question # 4

• Which of the following tests medial and lateral collateral ligament damage of the knee?
  • A) Anterior and Posterior Draw Tests
  • B) Apley’s Distraction and Compression Tests
  • C) Varus and Valgus Tests
  • D) McMurry’s and Lachman’s Tests
  • E) Spencer Tests

Example Question # 5

• A 30 year old male runner presents with left-sided low back and left hip pain. The pain started yesterday after an 8 mile run. The pain is sharp but does not radiate into the lower extremities. On exam, you notice tenderness over the left SI joint, a positive seated flexion test on the left, the sacral sulcus on the left is anterior, while the right ILA is posterior and inferior. Based on the information given, what is your most likely diagnosis?
  • A) Left sacral rotation on a left oblique axis (L on L)
  • B) Left sacral rotation on a right oblique axis (L on R)
  • C) Right sacral rotation on a left oblique axis (R on L)
  • D) Right sacral rotation on a right oblique axis (R on R)
  • E) Unilateral sacral flexion on the right (USFR)

Example Question # 6

• The end point at which a patient can actively move any given joint is defined as?
  • A) A physiologic barrier
  • B) An anatomic barrier
  • C) A restrictive/pathologic barrier
  • D) A rotational barrier
  • E) An elastic barrier
Commonly referenced areas to review in regards to OPP cases and board questions

- Osteopathic Terminology
- Musculoskeletal Landmarks
- Acute and Chronic Somatic Dysfunction (TART)
- Barriers
- Fryette’s Principles
- Areas of Vertebral Motion
- Specialized Testing
- Treatment Types
- Chapman’s Reflexes

Osteopathic Terminology

- Somatic dysfunction is impairment or altered function of related components of the somatic (body framework) system
  - Skeletal somatic dysfunction
  - Arthroidal somatic dysfunction
  - Myofascial somatic dysfunction
  - Vascular somatic dysfunction
  - Lymphatic somatic dysfunction
  - Neural somatic dysfunction

Musculoskeletal Landmarks

- Anatomy
  - Review bones, muscles, ligaments, joints, nerves, arterial supply, and lymphatic drainage throughout the body
  - Rule of Three’s in the thorax
  - Ribcage typical and atypical ribs, true, false, and floating ribs, inhaled and exhaled ribs
Acute and Chronic Somatic Dysfunction (TART)

• TART is (T) Tissue texture changes, (A) Asymmetry, (R) Restriction, and (T) Tenderness

• Acute Changes
  – Tissue texture changes: Erythema, Warmth, Moist, Boggy/Edematous, and Contracted (hypertonic) muscle; Asymmetry is present; Restriction is present and painful with movement; Tenderness is sharp and severe

• Chronic Changes
  – Tissue texture changes: Pallor, Cold, Dry, Ropy/Fibrotic, and Decreased muscle tone; Asymmetry is present and the body has compensated; Restriction is present and decreased or no pain; Tenderness is dull, achy, and/or burning

Barriers

• Physiologic Barrier: Limits of normal active ROM
• Elastic Barrier: ROM between the physiologic and anatomic barriers of motion in which passive ligamentous stretching occurs before tissue destruction
• Anatomic Barrier: Limits of normal passive ROM; If this barrier is violated, tissue injury occurs (ie: ligament, tendon, or skeletal injury)
• Restrictive (or Pathologic) Barrier: Loss of normal ROM creating a limited new motion barrier

Diagram of Motion Barriers
Fryette’s Principles (1 & 2) and Nelson’s Principle 3

- **Principle (Type) 1:** Spine in neutral position (no flexion or extension), sidebending and rotation occur to opposite sides (a group of vertebra)
- **Principle (Type) 2:** Spine in non-neutral position (with flexion or extension), rotation and sidebending occur to the same side (single vertebra segment)
- **Principle 3:** Motion in one (vertebral segment) plane reduces ROM in other planes

### Areas of Vertebral Motion

<table>
<thead>
<tr>
<th>Segment and Area</th>
<th>Type of Mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>C0-C1</td>
<td>Occipitoatlantal</td>
</tr>
<tr>
<td>C1-C2</td>
<td>Atlantoaxial</td>
</tr>
<tr>
<td>C2-C7</td>
<td>Typical Cervical</td>
</tr>
<tr>
<td>C7-L5</td>
<td>Typical Thoracic and Lumbar</td>
</tr>
</tbody>
</table>
Specialized Testing

- Shoulder Tests (Adson’s Test, Apley’s scratch, Empty Can Test, Drop Arm Test, Yergason’s Test, Speed’s Test, Neer’s Test, O’Brien’s Test, Apprehension Test, Scapular Winging, Lift off Test)
- Tennis Elbow Test
- Wrist Tests (Phalen’s Test, Reverse Phalen’s Test, Tinel’s Test, Allen’s Test)
- Lumbar Spine Tests (Hip-dip Test, Straight Leg Raising Test)
- Sacrum and Innominate Tests (Standing Flexion Test, Pelvic Side Shift Test, Mark Test, Seated Flexion Test, Spring Test, Sphinx Test)
- Hip Tests (Ober’s Test, Patrick’s (FABERE) Test, Thomas Test)
- Knee Tests (Anterior and Posterior Draw Tests, Apley’s Compression and Distraction Tests, Lachman’s Test, McMurry’s Test, Patellar Grind Test, Valgus and Varus Stress Tests)
- Ankle Tests (Anterior Draw Test, Talar Tilt Test)

Treatment Types

- Direct vs. Indirect
  - Direct treatment is toward the barrier
  - Indirect treatment is away from the barrier
- Active vs. Passive
  - In Active treatment the patient assists during treatment
  - In Passive treatment the patient relaxes during treatment and the operator (physician) is in control

Treatment Types continued...

- Myofascial Release/Soft Tissue (Both, Both): Myofascial or Soft Tissues can be moved by the physician toward or away from the restrictive barrier and held for a few seconds, the patient do nothing or inhale/exhale/move eyes to enhance the release
- Muscle Energy (Direct, Active): The physician engages the patient’s restrictive barrier, the patient uses a counterforce for 3-5 seconds, a new restrictive barrier is re-engaged, and this is repeated 3-5 times
- Lymphatic Drainage (Direct, Passive): The physician removes the restriction and then augments lymphatic flow
- Counterstrain (Indirect, Passive): The tenderpoint of the patient is put in a position of ease, with pain 3/10 or less (0 pain is best), and this position is held or monitored for at least 90 seconds
Treatment Types continued...

- **HVLA (Direct, Passive):** The physician engages the patient’s restrictive barrier, then the physician applies a force to move through the patient’s restrictive barrier
- **Articulatory (Direct, Passive):** The physician engages the patient’s restrictive barrier and uses gentle repetitive forces to increase the ROM within that joint
- **Cranial (Both, Passive):** CRI 10-14 cycles per minute
- **Spencer Techniques (For Shoulders):** The patient lies in a lateral recumbent position with affected shoulder side up and the physician faces the patient and moves the shoulder into extension, flexion, circumduction, circumduction with traction, abduction, internal rotation, traction stretch, 6-8 times

Chapman’s Reflexes (or Points)

- **Chapman’s Reflex Points:** Specific “gangliform contractions” that are associated with visceral dysfunction. These reflex points anteriorly are smooth, firm, discrete, palpable nodules, 2-3 mm in diameter, located within the deep fascia or on the periosteum of bone; posteriorly are located between the spinous and transverse processes of vertebrae and are described as rubbery, TT changes similar to visceral-somatic reflexes. Gentle pressure on a Chapman’s Reflex Point will elicit a sharp pain. Treatment of Chapman’s Reflex Points (Direct, Passive): Decrease sympathetic tone to associated visceral tissues (deal with triggerpoints that radiate pain)

Chapman’s Reflexes Points continued...

- **Chapman’s Posterior Reflex Points:**
  - T2 esophagus, bronchus, thyroid - C1 middle ear L, cerebellum R
  - T2-3 upper lung and myocardium L R - C2 phary, tongue, larynx, sinus L, cerebellum R
  - T3 upper lung L - C3 neck L, cerebellum R
  - T4 lung L - C4 neck L, cerebellum R
  - T5 stomach L, liver R - C5 neck L, cerebellum R
  - T6 stomach L, liver and gall bladder R - C6 neck L
  - T7 spleen L, pancreas R - C7 neck L
  - T8 small intestines L -
  - T9 small intestines L, pylorus R -
  - T10 small intestines L, ovaries R -
  - T11 adrenals L, intestines R -
  - T12 appendix R -
  - L1 kidneys L -
  - L2 abdomen and bladder L, large intestine R -
  - L3 urethra L, large intestine R - sacrum S1 vagina, prostate, uterus
  - L4 large intestine R - sacrum S2 rectum
  - L5 urinary L
## Webinar Summary

- You now better understand the AOBFP certification exam
- You now can create an individualized study plan to maximize your exam and performance scores
- You now have had practice with OPP case and example questions, diagnosis, identifying landmarks, choosing OMT, and explaining the techniques used
- You now have reviewed commonly referenced areas in regards to OPP cases and board test questions
- **YOU WILL PASS the AOBFP certification exams, because... YOU KNOW THIS MATERIAL. YOU ARE A DO. THIS IS WHAT YOU DO EVERY DAY...**
- *SHOW WHAT YOU KNOW 🎉*

## Good References for Study

- The 5 Minute OMM Consult by Chonnell and Mason
- Easy OMT by W.H. Howard, III
- OMT Review by Savarese, Capobianco, and Cox
- COMLEX Review: Clinical Anatomy and OMM by Mody and Shah
- ACOFP Educational Video Resources for Teaching OMT Procedures through ACOFP & purchased by the Statewide Campus System
- OPP/OMT Integration Workshops # 1-4 by Gorbis, Doane, and Scott through the Statewide Campus System
- AOA Glossary through AACOM
- Foundations of Osteopathic Medicine
- Principles of Manual Medicine by Greenman
- An Osteopathic Approach to Diagnosis and Treatment by diGiovanna, Schiowitz, and Dowling