



UNDERSTANDING **NEW-WAVE** PODIATRY BOARD EXAMINATION QUESTIONS

As you are aware, there are many different kinds, methods and ways to ask board examination questions in podiatry - and the *new-wave* exams are getting more sophisticated each year; as are the test takers.

Some questions require almost a photographic memory for detail; some extremely deep clinical experience; while others suggest a multi-year medical or surgical residency is required for accuracy and completeness. Increasingly however, another kind of question may occur on your board tests. Called "points-to-pass", this type of interrogative has come and gone over the years, and may now be back in vogue for the test preparation and psychometrics industry [aka CPC, CBT, cognitive or hybrid questions, etc].

Thus, our Foot and Ankle Research Consortium, Inc., educational primer - a special feature of PodiatryPrep.com - will actually help you "get into the mind" of your examiner as you struggle to answer questions on your certification examinations. But, the general principles are applicable to all podiatric examinations, especially the ABPS, combined primary care / orthopedics boards / and the various AMSB tests in podiatry. Briefly, each examiner follows a mandated set of "points to pass" guidelines.

For example, if the Board has determined that an applicant must successfully answer 5 of 7 specific items, for a certain question, you must be sure that you answer at least 5 of these "pass points". Mentioning only 4 points, in this case, will cause you to fail the question. Getting 6 or even all seven items does not result in additional credit. In testing psychometrics, this is known as a "positive failure", and is similar to a "false positive" test in medicine. The result is the same however; inaccuracy and failure.

Now, the Board may deny this next statement, but they also may use a "points to fail" system on the written and / or computer and/ or oral portions of the examination. You might completely fail a question, by giving as little as one wrong response, if it was deemed one of the "points to fail". This may occur even though you successfully answer 6 of 7 "points to pass", correctly. In testing psychometrics, this is known as a "negative failure". Although, this may sound extremely harsh at first blush, it is really the way medicine works in the real clinical world, of patient care. And, each board examination test is precisely designed to mimic pragmatic clinical patient scenarios.

So, what is a "point to fail"?

Well, just suppose you are asked to diagnose and treat a complex ankle fracture for a surgery board. Being fully prepared, you know the mechanism of injury, make the correct diagnosis, suggest the correct surgical procedure with exact AO/ASIF technique, and suggest the appropriate follow-up treatment and physical therapy. The patient goes on to win the Olympic Games. Yet, you still failed. What happened!

Let's just say you gave the patient Keflex® for IV pre-operative prophylaxis, and the patient had a severe cross-sensitive allergy to penicillin derivatives, and DIED.

Opps! You are a brilliant student, but forgot to ask about allergies in the preliminary H & P portion of the question? It was a simple mistake, made because of your zeal to answer the surgical question. This is a "point to fail" and is similar to a "false negative" in medicine.

Do not, we repeat, do not let this happen to you. Remember, forewarned is forearmed!

Now, let's begin.

SAMPLE QUESTION 1: [paper, oral or computer]

Candidate Information:

A 45-year-old white female presents to your podiatry office with a complaint of a very painful stubbed right great toe, and joint. There were no other traumatic incidents. She is otherwise healthy. Proceed with your evaluation and treatment.

Examiners Information:

- Aids: X-rays: D.P., lateral, axial sesamoid (available after candidate performs a physical exam).
- HPI: About 3 hours ago the patient fell forward on ice. She states she heard a pop. The pain is aching and very much throbbing. There is swelling and she could not put her shoe back on.
- PMH: Asthmatic, use Alupent® inhaler

Physical Exam: General: WNL

- Dermatology: Edema, and Erythema 1st. M.P.J.
- Neurological: WNL Vascular: WNL
- Orthopedic: 1st. metatarsal head plantarly prominent. Hallux positioned above 1st. metatarsal.
- Extreme pain upon attempted motion (patient guards it; will not let you move it.)

Ask Candidate for a differential diagnosis:

- 1st MPJ dislocation with sesamoid fracture proximal phalanx fracture-metatarsal fracture

Have Candidate request X-rays and describe them:

- Reveals a dorsally dislocated 1st MPJ.
- MPJ, with the base of the proximal phalanx on top of the 1st. metatarsal head.
- Also a longitudinal fracture of the tibial sesamoid with sesamoid subluxed to either side of the metatarsal head.

Have candidate identify the dislocation type: Type II B. Have Candidate describe all types:

- Type 1: Inter metatarsal alignment is intact and sesamoids are not fractured.
- Type II a: Inter sesamoid ligament is disrupted but no fracture to sesamoids.
- The sesamoids come to lie widely separated medially and laterally about the metatarsal head.
- Type II b: The inter-sesamoid ligament is disrupted and one of the sesamoids (usually the fibular) is fractured. This is an avulsion fracture from further hyperextension: The proximal fragment remains attached to the other, sesamoid and the distal fragment remains attached to the base of the proximal phalanx.

Ask Candidate for treatment Plan:

Attempt Close Reduction:

- Anesthesia (local block).
- Traction, increase dorsiflexion to push hallux onto 1st metatarsal head, and then push to reduced position.
- BK, non-weight bearing cast for 6 weeks.
- Follow with surgical shoe with sesamoid accommodations if closed reduction fails:
- Open reduction with excision of fractured sesamoid.
- Walking cast for 3 weeks, then surgical shoe for 3 weeks.

Inform the Candidate:

During the exam the patient suffers difficulty breathing (shallow/rapid with strider). She left her inhaler at home.

Ask Candidate how to treat acute asthmatic attack?

- Reassurance
- Oxygen (2-3 L/min. canula)
- Epinephrine 1: 1000 .5 cc's every 15 -20 minutes.
- If severe, use solu-cortef (hydrocortisone succinate) 100 mg. IV.

Points to Pass (6 of 8):

1. Candidate obtained history of asthma.
2. Candidate gave adequate differential diagnosis (3 of 4).
3. Candidate described x-rays properly.
4. Candidate classified this injury as a Type II B.
5. Candidate was able to describe all types.
6. Candidate performed and described proper close reduction.
7. Candidate suggested proper post-reduction treatment 6 week BK NWB cast.
8. Candidate gave appropriate treatment for acute asthmatic attack.

QUESTION 2: [paper, oral or computer]

Candidate Information:

A 24-year-old white male presents to the local emergency room with a gunshot to his left foot. He was not a member of the local “crips” or “bloods” gang. Rather, he was cleaning his gun and it fired by accident. You are called to the emergency room as the podiatrist. Proceed with your evaluation and treatment of this patient.

Examiner's Information Sheet

- Aids: X-rays: D.P. lateral and oblique. They revealed a comminuted fracture of the 3rd metatarsal at the neck and a bullet under the 1st. metatarsal.
- HPI: Patient has the foot wrapped in a bloody towel and is bleeding profusely.
- If you remove the towel there is an entry hole on the dorsum, but no exit hole. Also, when you remove the towel, the bleeding increases and his blood pressure drops.

The Candidate should request his vital signs.

(This is a medical emergency and the patients PMH is not important at this time.)

- VS: BP = 90/160 (falls when compression removed, increases when compression applied).
- Pulse = 98. Respiration = 15 minutes.
- Take patient to the operating room to fix the bleeder.
- Inform candidate that the dorsalis pedis artery has been damaged.

Ask Candidate how to stop the bleeding (i.e. repair the artery).

Candidate should realize that ligation is not a choice.

Have Candidate request x-rays and describe them. Ask candidate what structures are found in the area of the bullet:

- Sesamoids
- Plantar medial nerve
- Flexor digitorum longus tendon
- Ask Candidate if the bullet should be removed? (Answer=yes). WHY? Due to weight-bearing area and sesamoids

Ask Candidate how the bullet should be removed?

- Through the entry wound.
- Another incision (through a separate incision).
- Inform the candidate that the procedure went well and the patient is stable.) Ask if there is any other measure they would like to take)?
- Tetanus prophylaxis
- Antibiotic prophylaxis

Inform the Candidate that the patient had a booster 2 years ago. (Candidate should not administer any prophylaxis)

Ask candidate to explain tetanus prophylaxis: (Immunized, uncertain, or incomplete immunization).

- Low risk wounds-one dose Tetanus Toxoid.
- Tetanus prone wounds-one dose of T.D. plus 250-to 500u of human Tetanus Immune Globulin (TIG).
- Note: Use separate syringe and sites for T.D. and TIG.
- Full Primary Immunization and Booster within 10 Years of Wound
- Low risk wound—do nothing.
- Tetanus prone wound-if more than 5 years since last dose, give one dose of T.D. (nothing if < 5 years) (this patient falls in this category).
- Neglected wound greater than 24 hrs. -- one dose of T.D. and 250-500u TIG.
- Full primary immunization, but more than 10 Years:
- Low risk wound-one dose TD
- Tetanus prone wound-one dose TD
- Neglected wound one dose TD plus 250-500u TIG.

Note: Primary immunization is two .5 ml. T.D. injections 4-6 weeks apart followed by another 6-12 months later.

Points to Pass (6 of 7)

1. Candidate requested vital signs.
2. Candidate realized the urgency of this case and took the patient to the O.R. immediately.
3. Candidate repaired the injured dorsalis pedis (did not ligate).
4. Candidate identified involved structures around the bullet.
5. Candidate removed the bullet.
6. Candidate did not do tetanus prophylaxis.
7. Candidate knew tetanus prophylaxis.

QUESTION 3: [paper, oral or computer]

Candidate Information:

A 52year old white woman presents to your office with a chief complaint of a painful "bunion" on her right foot. It hurts in and out of shoes, and has not responded to self- treatment. It seems to be genetic. Proceed with your evaluation and treatment.

Examiners Information:

History:

- Type and duration of symptoms (N.L.D.O.C.A.T.T.)
- Present for years, much worse over the last. 2 years. Pain over the dorsal medial eminence No history of trauma.
- Past treatment consisted of shoe therapy that no longer helps. Aggravated when she wears shoes
- Social history: She is a nurse and on her feet a lot. Also, she plays softball and is very active.
- Bunion formation and hallux deviation (D.O.C.)
- About 2 years ago her big toe seemed to go way over quickly and now it just hurts.

Physical Exam:

Candidate should examine patient both weight bearing & non-weight bearing

- ROM of the 1st. MPJ = 60 degrees dorsi-flexion and 10 degrees plantarflexion (no pain or crepitus)
- Biomechanical examination of the ankle, subtalar and midtarsal joints are normal.
- Gait analysis reveals she pronates throughout gait) but it is not tract bound

X-rays:

- HIPA = 4 degrees HA = 35 degrees
- IMA = 14 degrees
- PASA = 16 degrees DASA = 8 degrees
- Metatarsus Adductus angle = 21 degrees

Proposed Surgery:

You may perform a bi-correctional Austin osteotomy, or Revering-Laird modification. (Candidate must address the elevated PASA & IMA). Post-op management:

- Immediate post-op X-rays repeated at least once during the next 6 weeks.
- Eliminate propulsive phase of gait for at least 2 weeks.
- 6 to 8 weeks off work (no nursing duties).

Points to Pass: (need 4 out of 5)

1. Obtained adequate H&P, including patient lifestyle (work and recreational activities).
2. Performed exam of HAV (3 of 4) and assess quality of motion of 1st. MPJ–weight-bearing exam.
Gait analysis; check for tract bound
3. Requests and understands significance of x-ray examination (4 of 5 angle and dangles).
4. Recommended appropriate procedure (procedure must correct PASA and IMA).
5. Suggested appropriate post-op management (2 of 3)
 - ✓ Immediate post-op x-rays repeated at least once during next six weeks.
 - ✓ Eliminate propulsive phase of weight bearing for 2 weeks at least.
 - ✓ Inability to return to floor nursing duties for at least 6 weeks.



THE END