

***Preparation for the
USMLE Step 1***

**Nigata University School of Medicine
6th Junichi Okamoto**

発表内容

- ① 試験当日
- ② 最新問題例
- ③ 国試問題との比較
- ④ 対策方法
- ⑤ 高得点を取るために ～反省を踏まえて～
- ⑥ 学部生活の過ごし方
- ⑦ USMLE の勉強に取り組む意義

試験当日



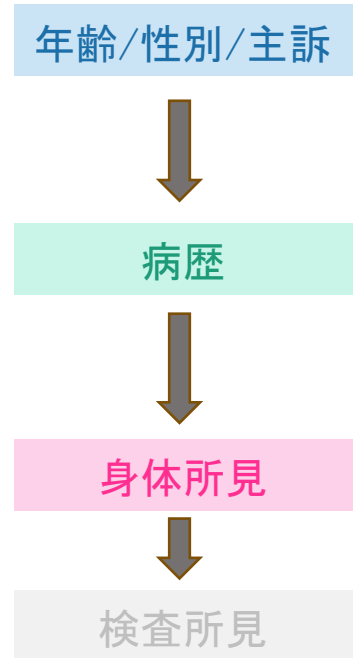
- 御茶ノ水ソラシティにてコンピューター上で受験
- 問題数: 1ブロック40問(1時間)x 7ブロック
- 試験時間: 7時間 + 休憩時間(トータル60分弱のみ)
- ボディチェック&サイン、コード入力で時間をとられる
- 本番は想定外に難しい!! 人生で最もしんどい受験

Step 1 の最新問題例 (Friedreich 運動失調症)

[公式サンプル問題 2016 より]

A 2-year-old boy is brought to the physician for a well-child examination. He was delivered at term after an uncomplicated pregnancy. His birth weight was 3500 g (7 lb 11 oz), and Apgar scores were 8 and 10 at 1 and 5 minutes, respectively. At the age of 15 months, physical examination showed no abnormalities, but he was not yet talking. Both of his parents had learning difficulties in school, and his mother stopped attending after the 10th grade. He has a maternal uncle with cognitive disabilities. He is at the 25th percentile for height, 15th percentile for weight, and 90th percentile for head circumference. He appears irritable, he resists making eye contact, and he is flapping his hands. Which of the following is the **most likely cause** of this patient's condition?

- (A) Creation of an alternative splice site
- (B) Frameshift mutation
- (C) Missense mutation
- (D) Nonsense mutation
- (E) Trinucleotide repeat expansion



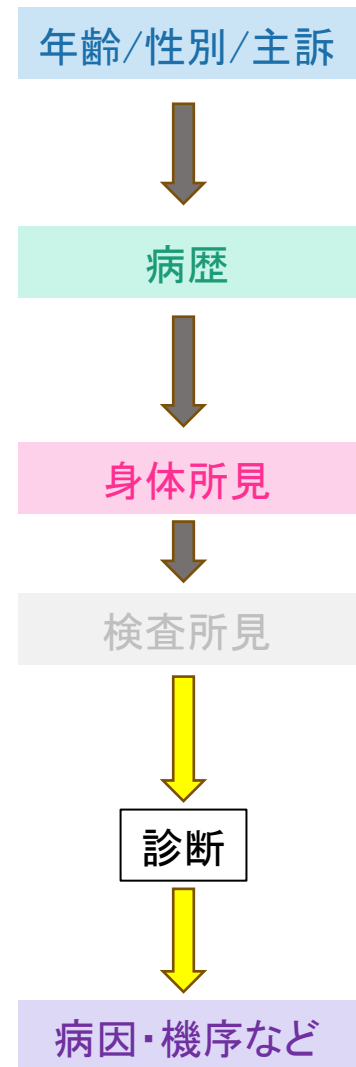
病因・機序など

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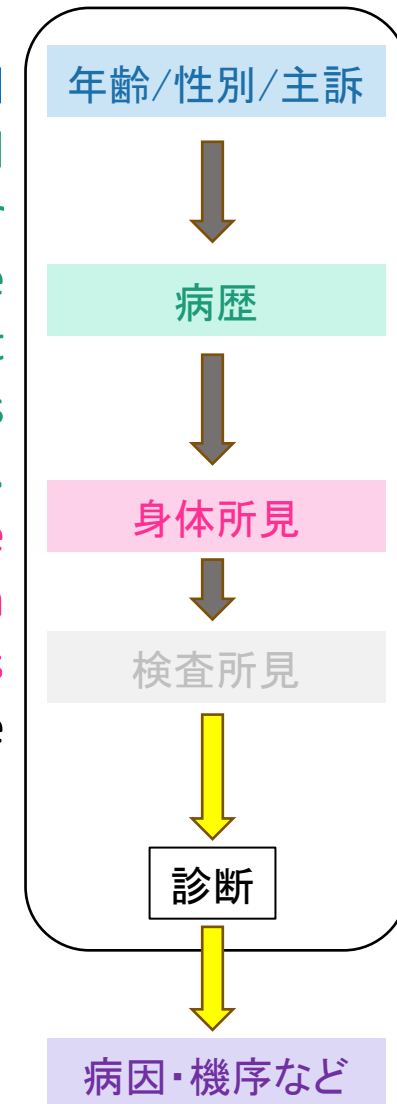


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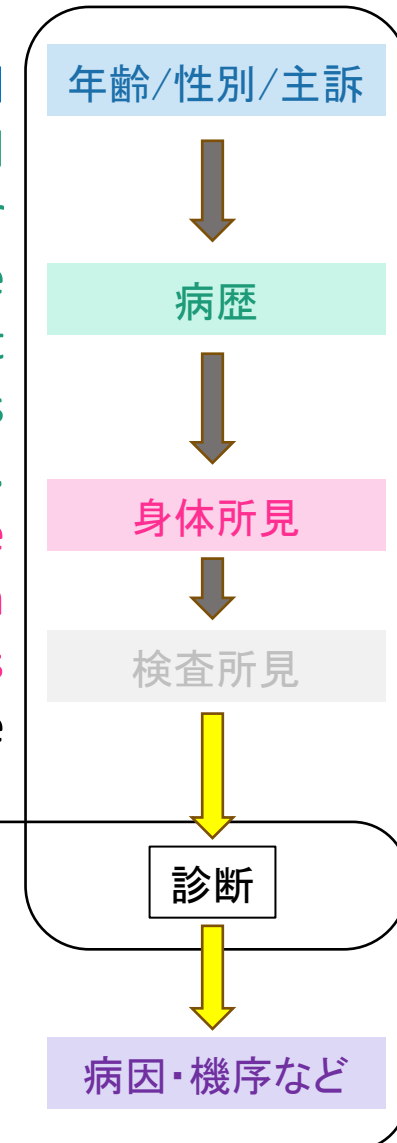


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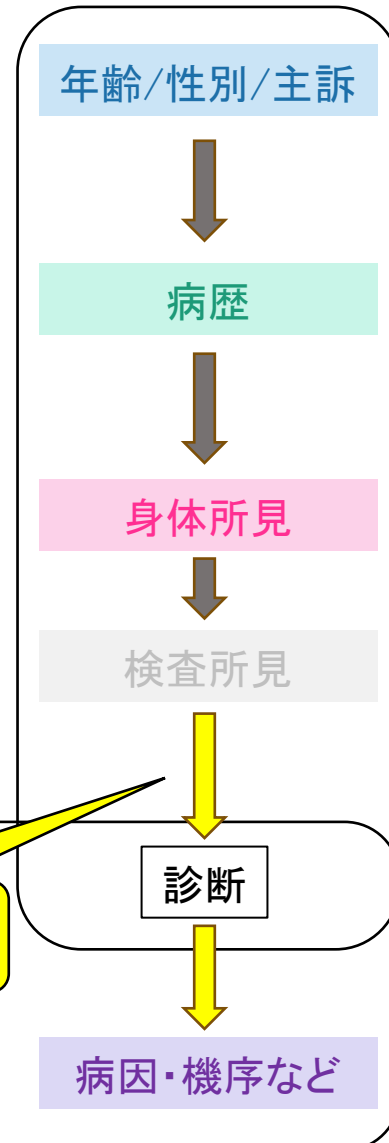


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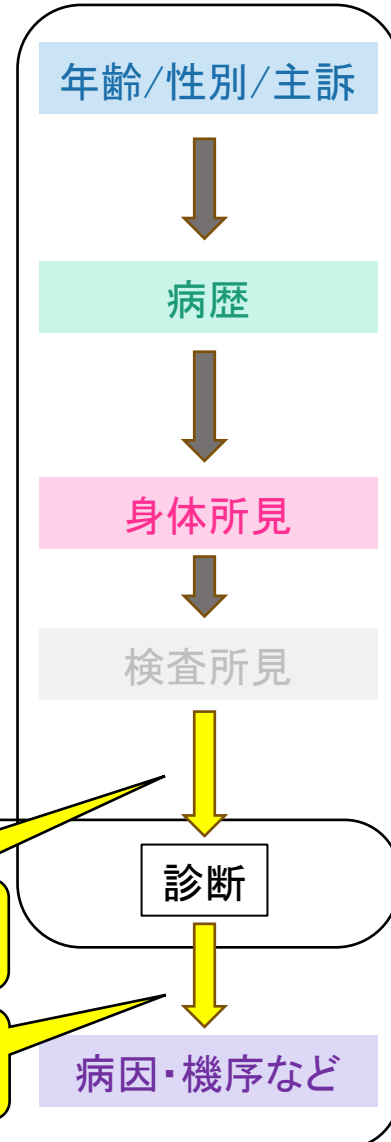


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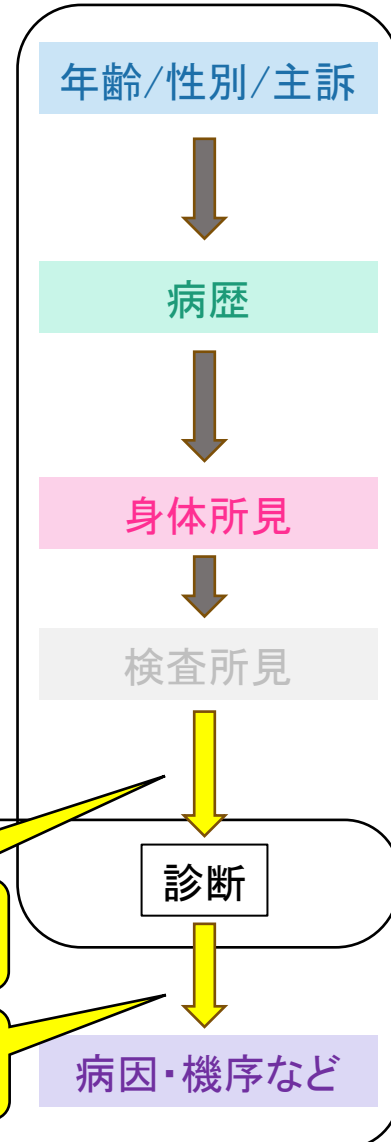


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マルチ
ステップな
臨床的思考
プロセス

病歴と身体所見
に基づく医学推論

実臨床に根ざした
基礎医学の知識

USMLE
Step 1 / 2 CK

日本の
国家試験

- ・英語(速読、読解精度)
- ・病歴、身体診察に基づく推論
- ・マルチステップな思考
- ・「機序」「次の方針」に重点

- ・画像所見の解釈
- ・マイナー科の詳細な知識
- ・日本の公衆衛生
- ・医学的事実の暗記と正誤判定

『将来の患者さんを助けるために、どちらも
今の自分に足りない知識を教えてくれるもの』

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Step 1 対策の3本柱

① 要点集

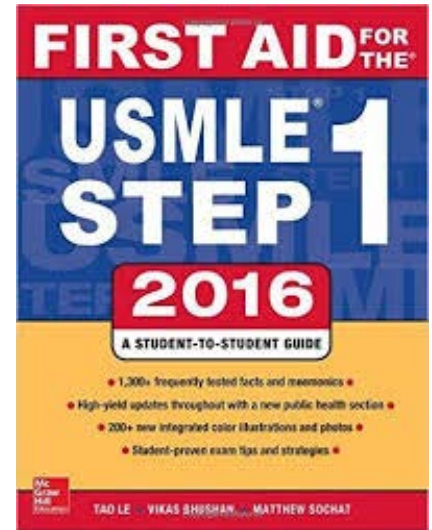
First Aid for the USMLE Step 1

② オンライン問題集(各~2400問)

- 1) UWorld: 絶対必須!
- 2) Rx Qmax: First Aid に準拠
- 3) Kaplan Qbank

③ NBME 模試

予想スコアは極めて精確



勉強したことを書き込んで
最終的に隅々まで覚えこむ

オンライン問題集

Item: 1 of 44

Q. Id : 2156 [509373]



A 64-year-old male presents to the emergency department with chest pain. An ECG reveals ST elevations in leads II, III, and aVF. Thrombolytic therapy and heparin are administered, and the pain resolves. Eight hours after admission, the patient develops hypotension. He denies recurrence of chest pain. His temperature is 37.8° C (99.6° F), blood pressure is 84/55 mm Hg, pulse is 90/min, and respirations are 15/min. His medications include a nitroglycerin drip, beta-blocker, aspirin, heparin, and simvastatin. Examination reveals an elevated jugular venous pressure of 14 cm, cold clammy extremities, and clear lung fields. Based on this information, what is the next best step in this patient's management?

- A. Start dopamine [9%]
- B. Administer normal saline bolus and stop nitroglycerin [51%]
- C. Administer intravenous furosemide [4%]
- D. Initiate temporary cardiac pacing [5%]
- E. Stop nitroglycerin and start dobutamine drip [31%]

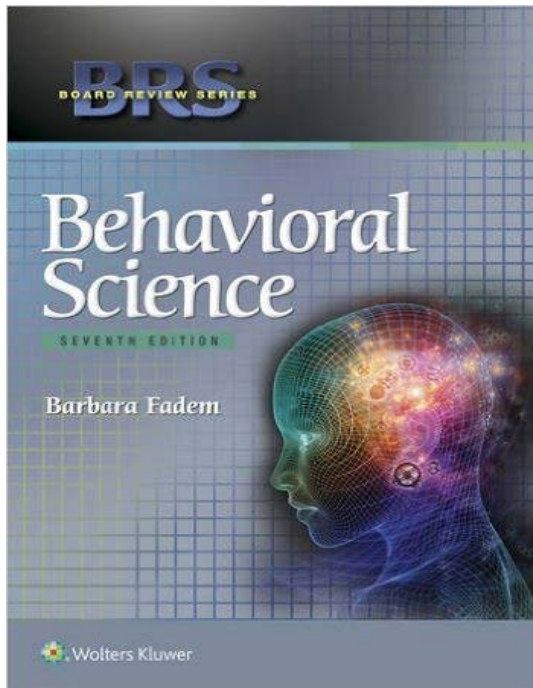
Explanation:

User Id: 509373

The ST elevations in leads II, III, and AVF indicate that this patient has suffered an inferior wall myocardial infarction (MI). Acute management of an ST segment elevation myocardial infarction (STEMI) generally includes reperfusion (thrombolysis or percutaneous angioplasty), antiplatelet therapy, morphine, heparin, nitrates, and beta-blockers. Nitrates and beta-blockers are contraindicated in certain circumstances, however. Nitrates are not indicated in the setting of aortic stenosis, recent phosphodiesterase inhibitor use, or right ventricular infarction (which occurs in more than 30% of cases of inferior wall MI). While left ventricular infarctions severe enough to cause hypotension also present with pulmonary edema, right ventricular infarctions present with clear lung fields. Jugular venous distention and hypotension are also frequently seen in the setting of a significant RV infarct, as in this patient. When the right ventricular stroke volume decreases, cardiac output is impaired. Therefore, any medication that reduces preload (eg, nitrates or diuretics) will exacerbate rather than improve symptoms. The first step in the treatment of right ventricular MI is generally IV fluid resuscitation to increase the RV stroke volume and enhance left ventricular filling.

(Choices A and E) When fluid resuscitation does not improve hemodynamics, dobutamine may be used to increase cardiac output through inotropic and chronotropic stimulation. However, hypotensive patients should also receive dopamine because dobutamine can worsen hypotension if given alone.

行動科学 (*Behavioral Science*)



- ・日本で系統的に習わない科目
必須テキスト: BRS Behavioral Science

- ・テーマ

- ① 成長と発達、老化と死
- ② 精神医学(違法薬物、睡眠医学など含む)
- ③ 医療倫理、患者対応、医療制度
- ④ 医学統計

③④は深い医学知識を要さないので、低学年でも勉強会に使用しやすい

- ・構成: 章ごとの要点 + 章末問題 + 巻末復習問題
- ・全部で約700題の問題演習が可能

- ・2015年から患者対応問題の出題数が増加傾向
→「傾聴第一」や「患者の意向が最優先」
を踏まえれば簡単に解ける問題、
常識的に解ける問題は本番に殆ど出なかった

Firecracker

オンライン暗記システム教材

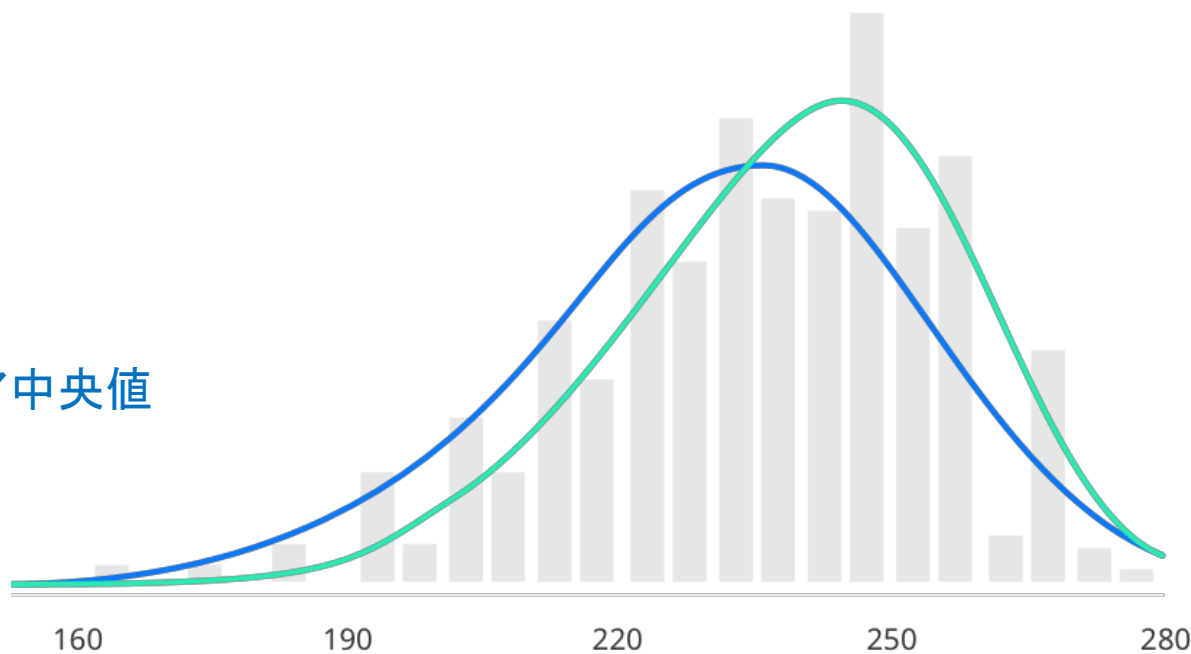
● Non-Firecracker ● Firecracker

利用者のスコア中央値

243

利用しなかった人のスコア中央値

229



(参考)

合格最低スコア: 192

北米医学生のスコア中央値: 230

<http://www.firecracker.me/>

- ・ 利用者の方が有意にスコアが高いことが証明されている
- ・ 2010年頃から米国医学生の間で爆発的に普及
- ・ 高得点を取られた先輩が強くお薦めしてくださっていた...

高得点を取るために ～反省を踏まえて～

- ① 最後は日本語での知識量で決まる。4年生までは学業が最優先！
- ② オンライン問題集や模試で新しい問題を妥協なく勉強し続ける
- ③ UWorld は解説もよく読んで丁寧に勉強する
(問題集を解くために最低限必要な知識を習得するだけでは、目新しい問題が際限なく出題される本番での対応が難しい)
- ④ NBME模試は早い段階から受け、予想スコアや分野別成績を踏まえる
- ⑤ Firecracker が最後の切り札

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米国臨床留学への憧れを何となく抱いていて、そのために学生のうちから頑張って USMLE Step 1 に合格したいです。



どのように医学部生活を送ればいいですか？

最優先！！！！

学業

英語コミュニケーション

課外活動／ボランティア活動

自主研究

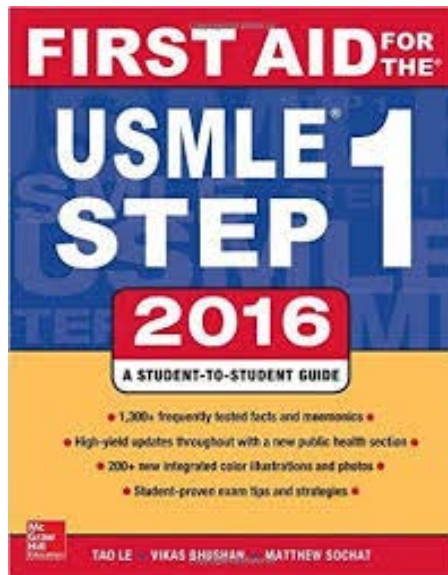
USMLE 対策

USMLE の勉強にとりくむ意義

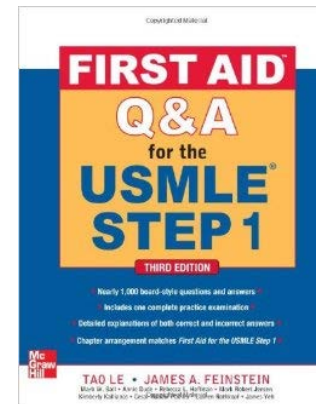
- ① 教材の質が高く、臨床的な思考プロセスを自学できる
- ② 病歴 & 身体所見に基づいて “Most likely” な診断を考える習慣が身につく
- ③ 医学英語を本気で学ぶ唯一最善の方法
- ④ 将来の進路の選択肢を広げるチャンス
- ⑤ 臨床実習が充実（先生方との対話や質疑の内容が深まる）
- ⑥ 臨床実習が楽（英語文献が処理しやすい／質の高い情報が手軽に得られる）
- ⑦ 国試の先を見据え、目標を持って医学の勉強に取り組める
- ⑧ 「より良い臨床医を目指したい」「国際的に貢献できる医師になりたい」という目標や夢に近づく（はず）

すぐに始められること

- First Aid や(オンライン)問題集を購入してみる
- 勉強仲間を見つける



&



あるいはオンライン問題集
Rx Qmax : 年間 \$199

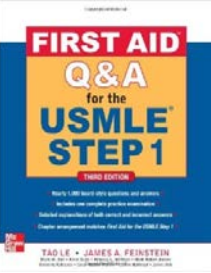
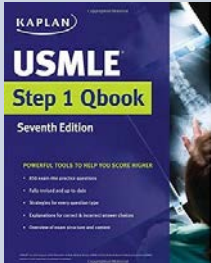
ご清聴ありがとうございました。

jokamoto28@gmail.com

↑ LINE ID

岡本 淳一

オンライン問題集の比較

| | 難易度 (vs 本番) | 本番の傾向の反映 | 初学 向きか | 問題 の質 | 解説 の質 | 類題を含む 紙媒体問題集 |
|-----------------------------------|----------------|----------|--------------------------------------|----------|----------|---|
| UWorld A ⁺ | 近い | ◎ | △ First Aid 参照 ページ番号の 表示がない | ◎ | ◎ | — |
| Rx Qmax A | 易しめ | △ | ◎ | ○ | ○ |  △ |
| Kaplan Qbank A ⁻ | 近い | ○ | ○ | △ | ○ |  ○ |