

## Corrections to *First Aid Q&A for the USMLE Step 1*

The following is the official update list for the 1st Ed of the First Aid Q&A for the USMLE Step 1 Errata. This list does not include suggestions/additions submitted and accepted for the text. For updates to previous editions, please visit the [Q&A for the USMLE Step 1 Archives](#) page.

The First Aid/USMLE Rx Team  
6/30/2008

1. Page 21
  - a. Question 17: The second sentence should say, "Urine cultures are positive for *Enterococcus faecium*."
  - b. Question 18: Choice C should read, "Infertility."
2. Page 23
  - a. Question 28: The end of the second sentence should read, "...low levels of follicle-stimulating hormone (FSH), luteinizing hormone (LH), and thyroid-stimulating hormone (TSH) but normal levels of ACTH. In addition, the female progeny exhibit impaired milk secretion."
3. Page 28
  - a. Answer 1: Explanation B should read that Krabbe's disease results from a  $\beta$ - (rather than an  $\alpha$ -) galactosidase deficiency.
4. Page 31
  - a. Answer 10: The explanation for choice D is correct. However, the explanations for answers A and B should read: "Competitive inhibitors do not change the maximum reaction rate of the enzyme." The explanation for answer C should read: "A lower Michaelis-Menten constant ( $K_m$ ) would imply a lower affinity for the receptor. Therefore, compound A would have a higher  $K_m$  than compound B." Answer E should read: "Given that compounds A and B have different affinities for the receptor, their Michaelis-Menten constant values cannot be the same."
  - b. Answer 12: The correct answer is  $\beta$ -thalassemia, which corresponds to choice B (not A) in the question on page 29.
5. Page 42
  - a. Answer 39: The explanation for choice E should read, "Unconjugated hyperbilirubinemia..."
6. Page 45
  - a. Answer 48: The explanation listed as A actually describes answer choice B. The correct explanation for choice A should read, "Angiotensin-converting enzyme (ACE) is found primarily in the lungs but is also present throughout the body. ACE is a key enzyme involved in the renin-angiotensin system and converts angiotensin I to angiotensin II, a potent vasoconstrictor. However, it is not associated with neonatal distress syndrome."

7. Page 56
  - a. Answer 11: The correct answer is E, not D.
8. Page 66
  - a. Question 3: An arrow is mentioned in the stem that is not apparent (or necessary) on the image.
9. Page 81
  - a. Question 74: The descriptions for choices E and F should read, "coagulase-negative."
10. Page 100
  - a. Answer 49: In choice A, abetalipoproteinemia is associated with acanthocytes (spiculated RBCs) rather than burr cells (which are seen in hemolytic uremic syndrome).
11. Page 109
  - a. Answer 74: The explanations for choices E and F should read, "coagulase-negative."
12. Page 117
  - a. Answer 3: In the explanation for choice B, metoclopramide is a cholinergic agonist and a dopamine antagonist.
13. Page 122
  - a. Answer 16: In choice D, amiodarone has properties of both class I and class III (not IV) antiarrhythmics.
14. Page 132
  - a. Question 9: Lead-in is missing: "Which of the following is the most frequent cause of viral myocarditis in the United States?"
15. Page 143
  - a. Answer 8: In choice A, in the second sentence, epinephrine's effects are due to stimulation of  $\beta_1$  (not  $\alpha_1$ ) receptors. In choice C, norepinephrine has a more potent  $\alpha$  effect than  $\beta$  effect. Also in choice C, propranolol is a  $\beta$  (not  $\alpha$ ) blocker. In choice E, phentolamine should be described as a nonselective  $\alpha$  blocker.
16. Page 151
  - a. Answer 30: The explanation for B should read, "Fibrates such as gemfibrozil and fenofibrate act by increasing lipoprotein lipase activity. HDL cholesterol and triglyceride levels subsequently improve after beginning treatment. These drugs have also been shown to assist in treating insulin resistance." And the explanation for C should read, "Niacin acts by decreasing lipolysis in adipose tissue. Its most significant result is an increase in serum HDL cholesterol. Adverse effects include flushing."
17. Page 160
  - a. Question 2: The stem should indicate the potassium level is decreased, not elevated.
18. Page 165
  - a. Question 28: The term "bronze-colored skin" should be replaced with "acanthosis nigrans."
19. Page 175

- a. Answer 11: Choice D should read, “A nonfunctioning pituitary adenoma could suppress ACTH in the serum and would generally be accompanied by hypocortisolemia. Clinical findings would include weight loss, hypotension, fatigue, nausea, abdominal pain, and muscle cramps.”
20. Page 176
- a. Answer 14: In choice C the references to circumoral paresthesias and Chvostek’s and Trousseau’s signs should be stricken; these are signs of hypocalcemia, not hypercalcemia.
21. Page 183
- a. Answer 31: In the correct explanation (C), the last two sentences (beginning “Oxytocin...” and “It...”) should be stricken; they are duplicates.
22. Page 189
- a. Answer 46: In explanation E, delete the fourth word from the end of the last sentence (“action”). The phrase should read, “...rather, these cells are the site of dopaminergic inhibition as a consequence of the action of prolactin at the hypothalamus.”
23. Page 190
- a. Answer 48: In explanation E, the word “hormone” is missing from the second sentence. The second sentence should read, “While parathyroid hormone (PTH) and PTH-related peptide ...”
  - b. Answer 50: In the correct explanation (D), the term “deficiency” is missing. The sentence should start, “17- $\alpha$ -Hydroxylase deficiency, a form of ...”
24. Page 192
- a. Question 2: In each of the five distracters, the term “contractions” should be deleted.
25. Page 197
- a. Question 30: The last word of the first sentence of the vignette (“hemoptysis”) is incorrect and should be changed to “hematemesis.”
26. Page 198
- a. Question 32: The arrow in the image should be pointing to Auerbach’s myenteric plexus.
27. Page 200
- a. Question 43: The third sentence should read, “An x-ray of the abdomen is shown in the image.”
28. Page 207
- a. Answer 15: In the correct explanation (D), the next-to-last sentence misspells the species name. The correct microorganism is “*S. mansoni*.”
29. Page 211
- a. Answer 29: The explanation for choice C should read, “Like infection with *Shigella*, *Salmonella* infection can also lead to fever, abdominal pain, and bloody stools. *Salmonella* is capable of

invading the mucosal epithelium, causing salmonellosis. It is a nonlactose fermenter but, unlike *Shigella*, produces gas and hydrogen sulfide.”

30. Page 212
  - a. Answer 30: In the correct explanation (B), the word “hemoptysis” is incorrect and should be changed to “hematemesis.”
31. Page 216
  - a. Answer 45: The explanation for choice B should read, “κ [not μ] Receptors are not the primary receptors involved in the heroin response....”
32. Page 223
  - a. Question 15: Option A should read 13, not 1.
33. Page 227
  - a. Question 38: The vignette and lead-in should read: “A 57-year-old man presents to his physician with a 4-month history of worsening fatigue and generalized weakness. Further questioning reveals that his clothes fit him more loosely now than they had in the past. Physical examination reveals generalized lymphadenopathy and hepatosplenomegaly. Lymph node biopsy specimens are sent to the pathologist with the presumptive diagnosis of lymphoma. Which of the following types of neoplastic cell is most common in non-Hodgkin’s lymphoma?”
34. Page 229
  - a. Question 49: There is a sentence fragment in the first full sentence in the second column. The sentence should read, “A microscopic pathology report indicates that the specimen consists of compact areas of spindle cells with pink cytoplasm that form whorls and palisades.”
35. Page 233
  - a. Answer 11: Explanation B should read: ““Strokes in sickle cell patients due to large vessel occlusion are a major cause of morbidity. Aspiration pneumonia could be a complication of these neurologic events, but this does not explain increased susceptibility to infection with encapsulated bacteria.”
  - b. Answer 11: Explanation C should read: “*Although micro-infarcts in the pulmonary vasculature are a chronic complication of sickle cell disease and constitute a leading cause of death for these patients, they are not responsible for the patient’s susceptibility to infections with encapsulated organisms.*”
36. Page 235
  - a. Answer 15: Answer A should read, Chromosome 13 [not chromosome 1] is affected in retinoblastoma and osteosarcoma.
  - b. Answer 18: in choice B, the syndrome is known as Wermer’s syndrome (not Werner’s).
37. Page 243

- a. Answer 36: Replace explanation C with the following: “Coronavirus is an RNA virus that causes the common cold. The recent URI may have been caused by coronavirus, but this does not explain the ongoing respiratory problems and eosinophilia.”
  - b. Answer 37: Replace explanation A with the following: “The marker for choriocarcinoma is  $\beta$ -human chorionic gonadotropin. This marker is also elevated with hydatidiform moles and gestational trophoblastic tumors. The presence of a hepatoma has no effect on this marker.”
38. Page 247
- a. Answer 48: In the explanation for answer B, HbA<sub>2</sub> should be described as  $\alpha$ -2  $\delta$ -2 (rather than  $\alpha$ -2  $\beta$ -2).
39. Page 252
- a. Question 14: The fourth sentence should read, “On examination, the physician notes hyperextensible joints and increased [not decreased] skin elasticity...”
40. Page 261
- a. Answer 2: In second column, the 8th line is missing an ?, and the term should be “tumor necrosis factor- $\alpha$ .”
41. Page 266
- a. Answer 14: In the first full sentence in the second column, the word “decreased” is incorrect and should be replaced with “increased.”
42. Page 282
- a. Question 1: Distracter F is misspelled; the correct spelling is “*Neisseria meningitidis*.”
43. Page 289
- a. Question 32: Distracter E is misspelled; the correct spelling is “*Toxoplasma gondii*.”
44. Page 293
- a. Answer 1: Distracter F is misspelled; the correct spelling is “*Neisseria meningitidis*.”
45. Page 298
- a. Answer 16: In explanation A, the word “serotonin” is incorrect and should be changed to “serotonergic.”
46. Page 302
- a. Answer 25: In explanation B, in the first sentence, the word “innovation” should be replaced by “innervation.”
47. Page 306
- a. Answer 34: In the correct explanation (B), the second sentence should read, “If the concentration of the drug ... “
48. Page 322
- a. Question 46: Answer choice C should read, “Subepithelial humps.”
49. Page 328
- a. Answer 15: In explanation A the last sentence should be stricken.
50. Page 330

- a. Answer 15: The explanation for choice B should read, "...NSAIDs decrease prostaglandins in the afferent [not efferent] arterioles ..."
- 51. Page 334
  - a. Answer 24: In the correct explanation (A), in the third sentence from the bottom, the term "inadverse" should be changed to "inside."
- 52. Page 335
  - a. Answer 28: In the correct explanation (D), in the first sentence the term "adverse" should be changed to "side."
- 53. Page 336
  - a. Answer 28: In explanation B, the word "adverse" should be changed to "side."
  - b. Answer 29: In the correct explanation (A), there is a sentence fragment. The corrected sentence is, "ATN is an intrarenal process, and intrarenal damage is marked by a decline in glomerular filtration rate, and BUN and plasma Cr concentrations increase in proportion to one another, thus the ratio remains below 15:1 in ATN."
  - c. Answer 29: In explanation E, in the third sentence, the word "body" should be changed to "blood."
- 54. Page 337
  - a. Answer 32: In explanation B, the first sentence should read, "Amiloride is also a potassium-sparing diuretic that directly inhibits sodium reabsorption at the cortical collecting duct and thus reduces potassium secretion at the same site."
- 55. Page 353
  - a. Question 31: Distracter C is misspelled; the correct spelling is "*Klebsiella pneumoniae*."
- 56. Page 355
  - a. Question 42: In distracter E the term "mucous" should be spelled "mucus."
- 57. Page 359
  - a. Answer 7: In the explanation for choice E, the second sentence should read, "Thyroid-releasing [not stimulating] hormone stimulates prolactin release..."
- 58. Page 371
  - a. Answer 36: In the explanation for choice E, the first sentence should read, "Sildenafil acts by decreasing [not increasing] levels of cGMP phosphodiesterase..."
- 59. Page 373
  - a. Answer 42: In explanation E, the term "mucous" should be spelled "mucus."
- 60. Page 392
  - a. Answer 11: For choices A, B, C, and D, these drugs are cardioselective and can be used in patients with asthma and other obstructive lung disease.

- b. Answer 13: In the correct explanation (D), the term “resonance” should be replaced with “percussion.”
  - c. Answer 14: In the correct explanation (D), the fourth sentence (beginning “Stratified...”) should be deleted, it is a duplicate.
- 61. Page 394
  - a. Answer 18: The explanation for choice E should read, “Serum sickness is a type III [not II] hypersensitivity reaction...”
- 62. Page 398
  - a. Answer 29: In explanation C, the word “asbestos” should be spelled “asbestosis.”
- 63. Page 401
  - a. Answer 41: The explanation for choice B represents the tidal [not total] volume.
  - b. “asbestosis.”
- 64. Page 408
  - a. Question 3: Stem should indicate the cardiac examination shows a diastolic [not systolic] ejection murmur.
- 65. Page 409
  - a. Question 3: The end of the fourth sentence should read, “... and a diastolic [not systolic] ejection murmur over the left upper sternal border. “asbestosis.”
- 66. Page 417
  - a. Question 42: The term “secondary” should be stricken from the lead-in.
- 67. Page 421
  - a. Answer 6: The explanations for choices B and D should be switched; infiltrating lobular carcinoma is associated with cells in a single-file formation, while Paget’s disease is associated with large cells with clear “halos.”
- 68. Page 430
  - a. Answer 29: The explanation for choice E should read that hypercalcemia and hyperphosphatemia are inconsistent (rather than consistent) with the patient’s calcium level.
- 69. Page 432
  - a. Answer 34: In explanation D, the term “antibodies” is missing; the first sentence should read, “Anti-IgG antibodies (rheumatoid factor) ... “
- 70. Page 434
  - a. Answer 40: In explanation A, the first sentence should read, “Histidine breakdown is impaired in histidase deficiency, which can lead to histidinemia.”
- 71. Page 437
  - a. Answer 47: In explanation C, the word “with” should be “which”: “In this answer choice, the level of TSH is elevated, which would lead to ...”
- 72. Page 440

- a. Question 1: The stem should read, “An oncologist recently discovered that certain cancerous cells secrete a protein named ca-1panc. Using this protein, he developed a new blood test to detect this type of cancer. He performed the blood test on 1,000 patients. One hundred of these patients had the cancer, and the test came back positive for 60 of them, while for the remaining 40 patients the test was negative. Nine hundred of the patients did not have the cancer; however, the test was positive for 100 of them. In the remaining 800, the test came back negative. Which of the following numbers represents how well the test identified those who had the cancer? “
  - b. Question 3: In distracter D, the word “septum” should be inserted: “Failure of the aorticopulmonary septum to spiral”
  - c. Question 7: In the third sentence in the vignette, the term “*Neisseria meningitides*” is misspelled. The correct spelling is “*Neisseria meningitidis*.”
73. Page 443
- a. Question 15: The fourth sentence should read, “On examination, the abdomen is markedly distended and is dull [not tympanic] to percussion.”
74. Page 456-457
- a. Answer 21: The explanation for the correct answer, danazol, should be association with choice A. The explanation for the antiestrogen clomiphene should be associated with choice B. The explanation for estrogen supplementation should be associated with choice C.
75. Page 458
- a. Answer 24: In explanation E, the first word “Etopoadverse” should read “Etoposide.”
76. Page 462
- a. Answer 35: In the correct explanation (A), in the last sentence, the correct term is “IgA protease-producing bacteria.”
77. Page 470
- a. Question 1: The patient is resistant to selective serotonin reuptake (not receptor) inhibitors.
78. Page 481
- a. Answer 1: In explanation D, the sentence should read, “The physician had an established physician-patient relationship ...”
79. Page 482
- a. Answer 4: In explanation E, the word “acid” is missing; the sentence should read, “The serotonin receptor, like the  $\gamma$ -aminobutyric acid receptor, is an ion-linked receptor.”
80. Page 495
- a. Answer 37: In explanation D, the second sentence is missing the words “its deficiency.” The sentence should read, “Folate is an essential cofactor in nucleic acid synthesis and its deficiency commonly leads...”

81. Page 496  
a. Answer 43: In the correct explanation (E), the third sentence is misprinted. It should read, "AIP results in aberrant accumulation of..."
82. Page 504  
a. Question 11: In the fourth sentence of the vignette, the word "left" should be changed to "right."
83. Page 505  
a. Question 18: The next-to-last sentence should read, "Microscopic examination of the patient's sputum reveals a fungal infection." Also, distracter E is incorrect; it should read, "*Malassezia furfur*."
84. Page 515  
a. Answer 6: In the correct explanation (E), in the second-to-last sentence, the word "cytoplasmic" should be deleted. The sentence should read, "Elevated serum antineutrophil cytoplasmic antibody ..."
85. Page 525  
a. Answer 34: The correct explanation (B) should read as follows: "The second enzyme activity involves galactose-1-phosphate uridyl transferase (G1PUR), which converts galactose-1-phosphate to glucose-1-phosphate. A deficiency in G1PUR results in classic galactosemia (which is depicted in the case scenario). A deficiency in the other pathways of galactose metabolism leads to a much milder presentation (i.e., only infantile cataracts). Increased galactose-1-phosphate is the correct answer because the patient demonstrates classic galactosemia, and the damaging elevated galactitol that follows can occur in G1PUR deficiency. Although treatment is not available, prevention of progression involves avoidance of galactose from the diet (i.e., no breast milk or lactose formulas). This deficiency, which occurs between the conversion of galactose to galactose-1-phosphate, would lead to relatively decreased galactose-1-phosphate. Galactose reduction by aldose reductase is then increased, forming galactitol."
86. Page 526  
a. Answer 34: In explanation C, the end of the first sentence is misprinted. This sentence should read, "...uridine diphosphoglucose, and galactose, and decreased glucose-1-phosphate."
87. Page 527  
a. Answer 37: In explanation B, in the last sentence, the term "positive" should be changed to "negative."
88. Page 537  
a. Question 37: Distracter D is misspelled; it should read, "*Neisseria meningitidis*."
89. Page 542

- a. Question 41: Answer choice E should read, "Tracheal deviation away from [not toward] the affected lung."
  - b.
90. Page 548
- a. Answer 11: The last sentence of the explanation for the correct answer (A) should be deleted.
91. Page 551
- a. Answer 17: In explanation D, the microorganism is misspelled; it should read, "*Neisseria meningitidis*."
  - b. Answer 19: In the correct explanation (E), in the second sentence, the term "bloody" should be changed to "blood."
92. Page 554
- a. Answer 27: In the correct explanation (A), in the last sentence, the word "virus" is missing: "It is a naked, icosahedral, double-stranded linear DNA virus that results in a self-limited illness that requires no treatment."
93. Page 556
- a. Answer 32: The explanation for option C should read, "Menopause symptoms are not the result of inhibition of (by not) estrogen."
94. Page 558
- a. Answer 36: In the correct explanation (D), in the third sentence, the term "principals" should be changed to "principles."
95. Page 560
- a. Answer 41: The explanation for choice E should read that, "...spontaneous pneumothorax will have tracheal deviation toward the side with the lesion."
  - b. Answer 42: The correct explanation should read that the 9-kb fragment came from F2 (not the mother), and the 6-kb fragment came from the mother (not F2).
96. Page 569
- a. Question 18: The second sentence should read, "Examination shows lens subluxation."
97. Page 571
- a. Question 26: Choice A should read 1/16.
98. Page 572
- a. Question 28: In the vignette, the word "extremities" should be change to "extremity."
99. Page 582
- a. Answer 14: In explanation A, the term "IIb/IIa" should be changed to "IIb/IIIa."
100. Page 586
- a. Answer 26: The correct answer is 1/16, the explanation should read, "While HLA-DR3- and/or HLA-DR4-positive individuals are at increased risk for developing type 1 diabetes, the causal nature of this association is still being researched. The DR locus is one of the class II major histocompatibility complex alleles, and therefore

presents peptides to CD4+ T lymphocytes. It should also be noted that carriers of the DR2 allele are less susceptible to type 1 diabetes. The answer to this question can be resolved based on genetic principles: (1) Since the proband's paternal grandmother and maternal grandfather carry a single copy of DR4 and DR3, respectively, the chance that the proband's father inherited the DR4 allele is 1/2. Similarly, the chance that the proband's mother inherited the DR3 allele is 1/2. (2) Since the proband's parents each have a 1/2 chance of contributing an allele to their offspring, the chance that the proband inherited DR4 from the father is 1/2 and the chance that the proband inherited DR3 from the mother is 1/2. (3) Thus, the probability of the proband inheriting the paternal grandmother's DR4 is  $1/2 \times 1/2 = 1/4$ , while the probability of the proband inheriting the maternal grandfather's DR3 is  $1/2 \times 1/2 = 1/4$ . (4) The probability that the proband inherited both of these alleles is thus,  $1/4 \times 1/4 = 1/16$ .

101. Page 588

- a. Answer 31: In the correct explanation (D), in the third sentence, the word "Mississippil" should be spelled "Mississippi."

102. Page 591

- a. Answer 39: The last sentence in explanation A should state, "Drugs that agonize (not antagonize)  $\beta_2$ -receptors are used in the treatment of asthma."

103. Page 603

- a. Question 29: Distracter D is misspelled; it should read, "*Nocardia asteroides*."

104. Page 604

- a. Question 33: In distracter A, "acids" should be singular.

105. Page 610

- a. Answer 6: In the correct explanation (A), in the last sentence, the word "shallow" should be changed to "swallow."

106. Page 612

- a. Answer 12: In explanation B, there is an extra "open parenthesis." The sentence should read "Ciprofloxacin is associated with ..."

107. Page 613

- a. Answer 13: In the correct explanation (A), at the end of the second sentence, the "comma" should be replaced by a "period." The sentence should end, "...which form in DNA exposed to ultraviolet light."

108. Page 614

- a. Answer 17: In explanation D, in the second sentence, the range should be changed from "< 6 12 years)" to "<12 years)."

109. Page 626

- a. Answer 48: In explanation C, the term "signet-cell ring" should be replaced with "signed-ring cell"

