

2008 First Aid for the USMLE Step 1
Official Updates, Corrections, and Clarifications
Updated 06/1/08

Despite our best efforts, errors do occur during the revision. If you see a verifiable error not on this list, please report it to our blog at www.firstaidteam.com. If you are the first to report the error, you will receive a **\$10 gift certificate**. This list will be updated again on **July 1, 2008**, and will be available at www.firstaidteam.com. Good luck!

–The First Aid/USMLERx Team

Page #	Entry Title	Correction/Clarification
p. 89	Cytoskeletal elements	The correct spelling of the fourth cytoskeletal element to the right of “Actin and myosin” is “adherens junctions,” not “adhering junctions.”
p. 91 *	Rate-determining enzymes of metabolic processes	The rate-limiting step of gluconeogenesis is fructose-1,6-bisphosphatase (FBP-1), not pyruvate carboxylase
p. 98 *	Glucose-6-phosphate dehydrogenase deficiency	The sentence in the third column under Heinz bodies should read, “Bite cells result from the phagocytic removal of Heinz bodies <i>by</i> macrophages, not “from macrophages.”
p. 100 *	Amino acids	In the discussion of glucogenic/ketogenic essential amino acids, tyrosine (Tyr) should be replaced with tryptophan (Trp).
p. 111	Heme synthesis	In the diagram, an arrow should be inserted between “Pre-uroporphyrinogen” and “uroporphyrinogen III.”
p. 114 *	Cloning methods	In the third sentence of item number 1, the word “ligate” should be replaced with “cleave” so that the sentence reads, “Restriction enzymes cleave DNA . . .”
p. 114 *	Model systems	In the first sentence of item number 2, the word “constitutive” should be replaced by “constitutional” so that the end of the sentence reads, “. . . recombination with mouse gene (constitutional).” The “constitutive” reference in item number 1 of this entry is correct as written and should not be changed.
p. 117 *, 313 *	Autosomal-recessive diseases, α_1 -antitrypsin deficiency	“ α_1 -antitrypsin deficiency” should be removed from the list of autosomal-recessive diseases, as it is considered to be codominantly inherited.
p. 119 *	Autosomal trisomies	The “prenatal screening” row of the Down syndrome column should read, “ \downarrow α -fetoprotein, \uparrow β -hCG” (i.e., the direction of both arrows should be reversed). The remainder of the entry, “ \uparrow nuchal translucency,” should remain unchanged.
p. 129 *	Branchial arch innervation	The maxillary branch (V_2) of the trigeminal nerve does not have a motor component.
p. 149 *	<i>Gardnerella vaginalis</i>	The sentence that reads “Sexually transmitted” should be removed from the entry. Sexual activity may increase the likelihood of an imbalance of vaginal flora but does not directly cause infection by <i>Gardnerella</i> .
p. 154 *	<i>Candida albicans</i>	The following sentences should be removed: “Transmission occurs by inhalation of spores. No person-to-person spread.”
p. 160 *	“Tricky T’s”	Endemic typhus is caused by <i>Rickettsia typhi</i> , not <i>R. rickettsii</i> ; the latter causes Rocky Mountain spotted fever.
p. 163 *, 167 *	RNA viruses, hepatitis viruses	Hepatitis E virus is now classified under the family Hepeviridae, so the virus type corresponding to HEV should be changed in both entries from calicivirus to hepevirus.

p. 183 *	Antifungal therapy	The word “purines” should be replaced with “pyrimidines” in this diagram.
p. 193	Differentiation of T cells	In the diagram, the phrase “inhibited by IL-4” to the right of the “Th1 cell” should be deleted along with the semicolon that precedes it.
p. 196 *	Antibody structure and function	The labels indicating the light-chain and heavy-chain hypervariable regions are reversed in the figure.
p. 203	Immune deficiencies, 2. ↓ activation of	Job’s syndrome is a defect of neutrophils , not macrophages. Please edit the subheading accordingly.
p. 210 *	Transudate vs. exudate	Transudate is due to ↓ oncotic pressure, not ↑.
p. 211 *	Amyloidosis — structure	In the sixth row of this table, the terms “Amyloid precursor protein (APP)” and “β-amyloid” should be switched so that β-amyloid appears in the “Protein” column and APP appears in the “Derived from” column.
p. 236	Sulfa drugs	The correct spelling of the drug is “sulfonyleureas.”
p. 244 *	Cardiac output	The second-to-last line should read, “Pulse pressure is <i>proportional</i> to stroke volume.”
p. 258 *	Infarcts: red vs. pale	The first sentence of this entry should read, “Red (hemorrhagic) infarcts occur in loose tissues with collaterals, such as lungs, intestine, or liver, or following reperfusion.” The duplicate word “liver” should be removed.
p. 266 *	Antihypertensive drugs	An adverse effect of diazoxide is <i>hyperglycemia</i> , not <i>hypoglycemia</i> .
p. 277 *	Adrenal steroids	Label B in the key at the bottom of the page refers to 21-hydroxylase deficiency. The letter “α” should be removed.
p. 291 *	Abdominal layers	The image in this entry is inverted, causing the aorta and the IVC to be on opposite sides. See “retroperitoneal structures” on the same page and “important GI ligaments” on page 295 for correct CT views.
p. 293 *	Portosystemic anastomoses	In the key to this entry, the definition of “SEV” should be changed to read <i>superficial</i> epigastric vein, not superior epigastric vein (as correctly described in text point 2 in the table directly below the diagram).
p. 296 *	Digestive tract anatomy	In the figure for this entry, the “mucosa” callout should be changed to read “muscularis mucosa,” and the existing callout for “muscularis mucosa” should be deleted along with its arrow.
p. 302 *	GI hormones	In the “secretin” row of this table, the last four words in the “regulation” column should be shifted to the “notes” column. The “regulation” column should thus read, “↑ by acid, fatty acids in lumen of duodenum,” and the “notes” column should read, “↑ HCO ₃ ⁻ neutralizes gastric acid in duodenum, allowing pancreatic enzymes to function.”
p. 316 *	Pancreatic adenocarcinoma	The image reference on the third line should be to Image 141, not Image 134.
p. 327 *	Lab values in anemia	TIBC is an indirect measurement of transferrin, rather than “indirectly proportional to transferrin” as written.
p. 330 *	Hemorrhagic disorders	The last sentence should have “XIII” added to it so that it reads, “PTT (intrinsic)—all factors except VII and XIII.”
p. 332	Non-Hodgkin's lymphoma	The phrase “most common (adult)” in the “Comments” column should be moved from Follicular lymphoma to Diffuse large cell lymphoma.
p. 344 *	Brachial plexus	The unlabeled black-and-white image in the third column should be labeled “Pope’s blessing.”
p. 357	Skin disorders (<i>continued</i>), Miscellaneous disorders	Acanthosis nigricans is “associated with hyperinsulinemia,” not “hyperlipidemia.”
p. 358 *	Arachidonic acid products	Under the heading of leukotrienes on the left side of the image, LTB should be replaced with LTE. LTB is a leukotriene that does not increase bronchial tone.

p. 375 *	Cranial nerves	For the abducens nerve (CN VI), the parenthetical phrase “arises from contralateral nuclei” should be deleted entirely.
p. 379	Extraocular muscles and nerves	CN IV damage causes diplopia with a defective downward gaze. Please edit the penultimate line accordingly.
p. 386 *	Brain lesions	A lesion of the parapontine reticular formation (PPRF) causes the eyes to look <i>away from</i> the side of the lesion, not toward. In addition, the spelled-out version of the acronym PPRF should be changed to <i>paramedian pontine reticular formation</i> .
p. 386 *	Brain lesions	A lesion of the frontal eye fields would cause the eyes to look <i>toward</i> the lesion, not away from the lesion as written.
p. 392	Primary brain tumors	In the right-hand diagram “Infratentorial/childhood tumors”, the parenthetical phrase “(exception: supratentorial)” should be inserted under “Craniopharyngioma” callout.
p. 393	Posterior fossa malformations	The indentation before “Dandy-Walker” should be removed.
p. 393 *	Facial lesions	The sentence in Bell’s palsy, “Only lower face is affected, since upper face has contralateral and ipsilateral innervations by CN VII,” refers to the UMN lesion section and should be moved accordingly.
p. 398 *	Neuromuscular blocking drugs	The correct spelling of the first complication listed for succinylcholine is “hypercalcemia.”
p. 426 *	Kidney endocrine functions	The molecule on the right side of the illustration should be 1,25-(OH) ₂ vitamin D.
p. 428 *	Renal tubular acidosis	Type 4 renal tubular acidosis causes <i>hyperkalemia</i> , rather than <i>hypokalemia</i> as written.
p. 430 *	Glomerular pathology	In the discussion of SLE, membranous glomerulonephritis is associated with subepithelial deposits, and diffuse proliferative glomerulonephritis features wire-loop subendothelial deposits, not subepithelial (as correctly indicated on page 431).
p. 433	Electrolyte disturbances	The superscript for the phosphate ion should be 3-, not 2-.
p. 433	Electrolyte disturbances	The repeated phrase “met calcifications” under “High serum concentration” for “PO ₄ ³⁻ ” should be removed.
p. 443	Menstrual cycle	For consistency with the text before it, the last line of the right column should read: “Ovulation day = menstruation day – 14.”
p. 444 *	Pregnancy	In the section on lactation, replace “estrogen” with “progesterone.”
p. 444 *	Pregnancy	In the last sentence, replace “oxytocin” with “prolactin.”
p. 453 *	Antiandrogens	In the second line of the rightmost column, the phrase “hair growth” should be replaced with “hair loss.”
p. 457 *	Pneumocytes	In the first sentence of this entry, replace the phrase “pseudocolumnar ciliated cells” with “pseudostratified ciliated columnar cells.”
p. 461 *	CO poisoning	For consistency with column three of the “hemoglobin modifications” entry on page 112, the first line of “CO poisoning” should read, “CO has 200x greater affinity for hemoglobin than does O ₂ ,” not 50 x .
p. 462	Oxygen content of blood	The indented line should read “Cyanosis results when deoxygenated Hb is > 5 g/dL.” Please edit the line accordingly.
p. 467 *	Lung cancer	In the large cell carcinoma row, the phrase “less tendency to metastasize and” should be deleted.
p. 478	Polyneuropathy, cardiac pathology, and edema	The correct associated disease should read “ Wet beriberi (thiamine or vitamin B ₁ deficiency).”

p. 509 *	Review Resources – Behavioral Science	<i>Rapid Review: Behavioral Science</i> is given a grade of “A-” on p. 509 and a “B” on p. 512. The correct rating for 2008 is “B.”
Color plates *	Image 41	The first portion of the caption for this image should read as follows: Color Image 41. Alzheimer’s disease. Key histologic features include “senile plaques” (not pictured); a coronal section showing atrophy, especially of the temporal lobes (A); and focal masses of interwoven neuronal processes around an amyloid core (B; arrows mark neurofibrillary tangles). The remainder of the caption describing panel C is correct and should be left as is.
Color plates *	Image 56	In the figure caption for this image, replace the term “swan-neck” with “boutonnière”.

* = *previously reported errata*