

**2020 First Aid for the USMLE Step 1
Corrections and Clarifications
June 10, 2020**

Despite our best efforts, errors do occur during the revision process. This list primarily addresses direct content errors that may create confusion. We also have listed selected clarifications. Please be aware, however, that this list does not represent the entire scope of additions, improvements, and clarifications expected in the 2020 edition.

Red signifies specific text to be deleted.

Green signifies specific text to be added.

We check every potential errata submission against your reference(s), authoritative references, and expert faculty to maximize clarity and accuracy. Please note that our goal is to provide a high-yield framework for optimal exam preparation and not a comprehensive textbook. If you were the first individual to submit a referenced correction or clarification to us at www.firstaidteam.com that appears in the errata or in the next edition of the book, you will receive a gift certificate in appreciation. Good luck with your studies!

– The First Aid/USMLE-Rx Team

CATEGORIES OF UPDATES

Major Corrections	Factual errors that could interfere with comprehension
Minor Corrections	Less significant errors that may cause confusion
Clarifications	The text is accurate but could be written more clearly, or minor formatting issues (misalignments, indents, etc) that may confuse

MAJOR CORRECTIONS

Page	Fact Name	Revision
78	Electron transport chain and oxidative phosphorylation	In the figure, the negative effects on complex IV are azide, cyanide, and CO (not CO₂).
287	Pressure-volume loops and cardiac cycle	In the right atrial pressure curve (JVP tracing) in the bottom left corner, the “A” wave should be larger than the “C” wave.
352	Carcinoid syndrome	In the treatment paragraph, rephrase as “surgical resection, somatostatin analog (eg, octreotide), or tryptophan hydroxylase inhibitor (eg, telotristat) for symptomatic control.”
382	Inflammatory bowel diseases	In the Gross Morphology row, delete (“string sign” on barium swallow x-ray [A]) and rephrase as (“string sign” on small bowel follow-through [A]).
416	RBC inclusions	In the Basophilic stippling row, the image shows a basophil, not an RBC with basophilic stippling. Image will be revised in the 2021 edition.

495	Neurotransmitter changes with disease	In the Serotonin row, in the Location of synthesis column, remove “(medulla, pons)” and replace with “(brain stem)”
507	Mastication muscles	(1) Replace “1 opens: Lateral pterygoid.” with “Lateral pterygoid protrudes the jaw.” (2) Delete the following mnemonics: “Lateral Lowers (when speaking of pterygoids with respect to jaw motion). “It takes more muscle to keep your mouth shut.”
525	Neurocutaneous disorders	In the Sturge-Weber syndrome row, in the Presentation column, replace “ipsilateral leptomeningeal angioma [B]” with “ipsilateral leptomeningeal angioma with calcifications [B]”
633	Pregnancy	In the graph, estrogen levels overtake progesterone levels at week 25 of gestation.

MINOR CORRECTIONS

Page	Fact Name	Revision
xxi	Selected USMLE Laboratory Values	In the Glucose, serum listing for 2-hr postprandial values, the reference range should read <140 mg/dL and the SI Reference Interval should read <7.8 mmol/L.”
41	Functional organization of a eukaryotic gene	The TATA box should represent a eukaryotic gene. Thus in the TATA box sequence, delete “TATAAT” and replace with “TATAAA.”
283	Anatomy of the heart	In most people, the RCA supplies the AV and SA nodes. Thus, in the Coronary blood supply row, in the 2nd paragraph, delete “AV node (dependent on dominance). And in the 3rd paragraph, delete “RCA supplies SA node (blood supply independent of dominance)” and replace with “RCA supplies AV node and SA node.”
296	Baroreceptors and chemoreceptors	The carotid sinus is anatomically part of the internal carotid artery, as shown in the drawing, not part of the carotid bifurcation, as stated in the text. Thus, delete “Carotid sinuses (dilated region at carotid bifurcation)” and replace with “Carotid sinuses (dilated region superior to bifurcation of carotid arteries)”.
297	Autoregulation	Adenosine has been shown to have no clinically relevant role in coronary autoregulation.
337	Signaling pathways of endocrine hormones	In the Receptor tyrosine kinase row, remove “tyrosine” to just say “Receptor kinase.”
387	Polyposis syndromes	In the Familial adenomatous polyposis row, delete “chromosome 5q22” and replace with “chromosome 5q21-q22.”

492	Posterior fossa malformations	In the Chiari II malformation row, remove “ aqueductal stenosis ” as a cause of noncommunicating hydrocephalus. Revise text as “Herniation of cerebellum (vermis and tonsils) and medulla (2 structures) through foramen magnum → noncommunicating hydrocephalus. Usually associated with aqueductal stenosis, lumbosacral myelomeningocele... ”
550	Inhaled anesthetics	In the Adverse effects row, in the entry for Malignant hyperthermia, remove “ voltage-sensitive ” to reads “ Mutations in ryanodine receptor (RYR1 gene)... ”
612	Early fetal development	Note that fetal cardiac activity is visible by transvaginal ultrasound during fetal age week 4 , not fetal age week 6 (gestational age 6 weeks).
653	Hormone levels in germ cell tumors	In the AFP row, in the Teratoma column, replace “ - ” with “ -/+ ”. In some cases, teratomas may have ↑ levels of AFP; however, ↑ AFP is not required for teratoma diagnosis.

CLARIFICATIONS

Page	Fact Name	Revision
48	Microtubule	Note that it is the toxin of <i>Clostridium tetani</i> that uses dynein for retrograde transport to the neuronal cell body, not the bacterium itself.
137	Enterococci	In the last sentence of the first paragraph, delete “ variable ” and replace with “ nonhemolytic. ”
140	Mycobacteria	In the first sentence, delete “ Gram (+) ” so it reads “ Acid-fast rods. ” Whether <i>Mycobacteria</i> are or are not Gram positive is controversial; what is important to know for the Step 1 exam is that <i>Mycobacteria</i> are acid-fast rods that Gram stain poorly.
159	Nematodes (roundworms)	In the <i>Toxocara canis</i> row, note that visceral larva migrans is often asymptomatic. Symptoms, if present, are related to inflammation as we describe.
423	Extrinsic hemolytic anemias	(1) In the Autoimmune hemolytic anemia row, in the Warm AIHA entry, rephrase as: “...chronic anemia in which primarily IgG causes RBC...” (2) In the Autoimmune hemolytic anemia row, in the Cold AIHA entry, rephrase “...acute anemia in which primarily IgM + complement cause RBC... ”
428	Mixed platelet and coagulation disorders	In the von Willebrand disease row, in the Notes column, revise as “ Most are autosomal dominant. ”
438	Cancer therapy—cell cycle	In the list under Antimetabolites, add an asterisk to “Cladribine [*] ” and add the corresponding footnote “ Cell cycle nonspecific. ”
490	Central and peripheral nervous system origins	Revise the second paragraph as follows: “Neural crest—PNS neurons and ganglia (Schwann cells, dorsal root ganglia), autonomic ganglia (sympathetic,

		parasympathetic, enteric), melanocytes, adrenal medulla, face/branchial arch mesenchyme.”
570	Psychoactive drug intoxication and withdrawal	In the Alcohol row, revise the treatment paragraph as follows: “Treatment: stabilization, supportive therapies, thiamine, benzodiazepines.”
599	Urinary incontinence	In the Associations row, in the Overflow incontinence column, replace “neurogenic bladder” with “spinal cord injury.”
640	Pregnancy complications	<p>(1) In the Placenta previa row, in the drawing on the left, change “Partial placenta previa” to “Low-lying placenta” and note that the edge of the placenta will be <2 cm from the internal os.</p> <p>(2) In the Placenta previa row, in the drawing on the right, change “Complete placenta previa” to “Placenta previa.”</p>