

**2020 First Aid for the USMLE Step 1  
Corrections and Clarifications  
December 31, 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 2021 edition.

**Red** signifies specific text to be deleted.

del

**Green** signifies specific text to be added.

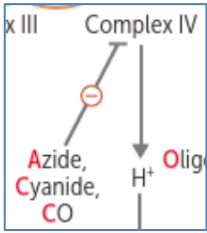
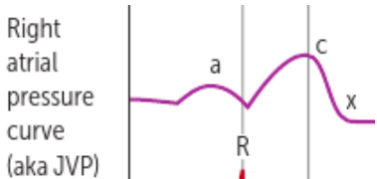
We check every potential errata submission against your reference(s), authoritative references, and expert faculty to maximize clarity and accuracy. Please note that our goal is to provide a high-yield framework for optimal exam preparation and not a comprehensive textbook. If you were the first individual to submit a referenced correction or clarification to us at [www.firstaidteam.com](http://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**

<b>Major Corrections</b>	Factual errors that could interfere with comprehension
<b>Minor Corrections</b>	Less significant errors that may cause confusion
<b>Clarifications</b>	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	<b>Electron transport chain and oxidative phosphorylation</b>	<p>In the figure, the negative effects on complex IV are azide, cyanide, and <b>CO</b> (not <b>CO<sub>2</sub></b>).</p> 
287	<b>Pressure-volume loops and cardiac cycle</b>	<p>In the right atrial pressure curve (JVP tracing) in the bottom left corner, the “A” wave should be larger than the “C” wave.</p> <p><b>Book:</b></p> 

352	<b>Carcinoid syndrome</b>	In the treatment paragraph, rephrase as “surgical resection, somatostatin analog (eg, octreotide), or tryptophan hydroxylase inhibitor (eg, telotristat) for symptomatic control.”
382	<b>Inflammatory bowel diseases</b>	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	<b>RBC inclusions</b>	<p>In the Basophilic stippling row, the image shows a basophil, not an RBC with basophilic stippling. Here is a photo of basophilic stippling:</p>  <p>The image shows a single basophil, a type of white blood cell, characterized by its dark purple, granular cytoplasm. The granules are densely packed and obscure the nucleus. The text 'Basophilic stippling' is overlaid on the left side of the image. A small 'x' icon is visible in the bottom right corner of the image frame.</p>

495	<b>Neurotransmitter changes with disease</b>	In the Serotonin row, in the Location of synthesis column, remove “(medulla, pons)” and replace with “(brain stem)”
507	<b>Mastication muscles</b>	<ul style="list-style-type: none"> <li>(1) Replace “1 opens: Lateral pterygoid.” with “Lateral pterygoid protrudes the jaw.”</li> <li>(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.”</li> </ul>
525	<b>Neurocutaneous disorders</b>	In the Sturge-Weber syndrome row, in the Presentation column, replace “ipsilateral leptomeningeal angioma [B]” with “ipsilateral leptomeningeal angioma with calcifications [B]”

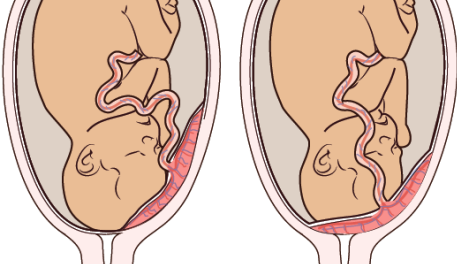
## MINOR CORRECTIONS

Page	Fact Name	Revision
xxi	<b>Selected USMLE Laboratory Values</b>	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	<b>Functional organization of a eukaryotic gene</b>	Step 1 represents a eukaryotic gene. Thus in the TATA box sequence in step 1, delete “TATAAT” and replace with “TATAAA.”
283	<b>Anatomy of the heart</b>	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	<b>Baroreceptors and chemoreceptors</b>	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	<b>Autoregulation</b>	Adenosine has been shown to have no clinically relevant role in coronary autoregulation. Local vasodilatory metabolites in the heart include NO, CO <sub>2</sub> , and decreased O <sub>2</sub> .
387	<b>Polyposis syndromes</b>	In the Familial adenomatous polyposis row, delete “chromosome 5q22” and replace with “chromosome 5q21-q22.”

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

## CLARIFICATIONS

Page	Fact Name	Revision
48	<b>Microtubule</b>	Note that it is the <b>toxin</b> of <i>Clostridium tetani</i> that uses dynein for retrograde transport to the neuronal cell body, not the bacterium itself.
137	<b>Enterococci</b>	In the last sentence of the first paragraph, delete “ <b>variable</b> ” and replace with “typically <b>nonhemolytic</b> .”
140	<b>Mycobacteria</b>	In the first sentence, delete “ <b>Gram (+)</b> ” so it reads “ <b>Acid-fast rods</b> .” 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	<b>Nematodes (roundworms)</b>	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	<b>Extrinsic hemolytic anemias</b>	(1) In the Autoimmune hemolytic anemia row, in the Warm AIHA entry, rephrase as: “...chronic anemia in which <b>primarily IgG</b> causes RBC...” (2) In the Autoimmune hemolytic anemia row, in the Cold AIHA entry, rephrase “...acute anemia in which <b>primarily IgM + complement</b> <b>cause</b> RBC...”
428	<b>Mixed platelet and coagulation disorders</b>	In the von Willebrand disease row, in the Notes column, revise the 3rd paragraph as “ <b>Most are</b> autosomal dominant.”
438	<b>Cancer therapy—cell cycle</b>	In the list under Antimetabolites, add an asterisk to “Cladribine*” and add the corresponding footnote “ <b>Cell cycle nonspecific</b> .”
490	<b>Central and peripheral nervous system origins</b>	Revise the second paragraph as follows: “Neural crest—PNS neurons ( <b>dorsal root ganglia, autonomic ganglia [sympathetic, parasympathetic, enteric]</b> ), PNS glial cells (Schwann cells, <b>satellite cells</b> ), adrenal medulla, <b>melanocytes, face/branchial arch mesenchyme</b> .”

570	<b>Psychoactive drug intoxication and withdrawal</b>	In the Alcohol row, revise the treatment paragraph as follows: "Treatment: <b>supportive (eg, fluids, antiemetics).</b> "
599	<b>Urinary incontinence</b>	In the Associations row, in the Overflow incontinence column, replace " <b>neurogenic bladder</b> " with " <b>spinal cord injury.</b> "
640	<b>Pregnancy complications</b>	 <p>In the drawing on the left, change "<b>Partial placenta</b>" and note that the edge of the placenta is covering the cervical os. In the drawing on the right, change "<b>Placenta previa</b>."</p>