

The comments displayed in the below samples explain each change made in the edits. In actual edits, however, we do not provide comments for every language change. Instead, we use **Remarks and Tags** to communicate with the author.

The QT interval on the electrocardiogram (ECG) is the time measured from the start of the QRS complex to the end of the T wave. This interval represents the ventricular myocardium activation and recovery durations of the ventricular myocardium. The normal duration of the QT interval corrected for heart rate (QTc) is up to 0.44 seconds. QTc is calculated using the Bazett formula as follows: $QTc = QT / \sqrt{RR}$ interval. Although QTc can be more prolonged in females (up to 0.46 see), QTc in females that extending more than 0.44 seconds is are generally considered generally irregular abnormal.

For accurate measurement of the QT interval, the relationship of between QT and the R-R interval should be able to be repeated repeatable. [Remark 1] This issue is important when the heart rate is less than >50 bpm or more than <120 bpm. In addition, A accurate measurement of the QT interval is also important in sportsman athletes and children who have a significant beat-to-beat variability of the R-R interval. In line with this such cases, prolonged and numerous recordings are possible to may be necessary. The longest QT interval is generally observed generally in the correct right precordial leads.

Long QT syndrome (LQTS-) is a congenital disorder has typical characters of atypified by a protracted QT interval on the ECG. This condition predisposes to the development of the ventricular-ventricular. [Remark 2] tachyarrhythmias, that-which may lead to syncope, cardiac arrest, or swift sudden death. In LQTS, QT prolongation might cause can lead to polymorphic ventricular tachycardia, which is also referred to as torsade de pointes. This condition itself may might on its own lead to VF. [Remark 3] and sudden cardiac death.

Torsade de pointes is widely thought believed to be triggered with aby calcium channel reactivation, a delayed Na sodium current reactivation, or a diminished outward potassium current that results in an early afterdepolarization (-EAD). This leads to enhanced transmural

Comment [Crimson1]: Grammar:
Countable nouns are usually preceded by articles.
Terms such as "complex" and "interval" are countable nouns, and therefore, an article has been added.

Comment [Crimson2]: Subject changes:
Abbreviation defined in the first mention need not be repeated again in the manuscript according to the standard convention.

Comment [Crimson3]: Grammar:
Here the addition of the term "interval" was necessary to make the sentence clear.

Comment [Crimson4]: Language correctness:
Words rearranged for better flow of information.

Comment [Crimson5]: Consistency:
The term "seconds" has been used in three different manners in the manuscript. We have

Comment [Crimson6]: Grammar:

Comment [Crimson7]: Language

Comment [Crimson8]: Spacing checked:

Comment [Crimson9]: Typographical err

Comment [Crimson10]: Grammar:

Comment [Crimson11]: Language

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Comment [Crimson12]: Language

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Comment [Crimson13]: Language

Comment [Crimson14]: Language

Comment [Crimson15]: Language

Comment [Crimson16]: Grammar :

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Comment [Crimson17]: Grammar:

Comment [Crimson18]: Style of English:

Comment [Crimson19]: Language

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Comment [Crimson20]: Subject changes

Comment [Crimson21]: Grammar:

Comment [Crimson22]: Consistency: Th

dispersion of repolarization (TDR) and is usually in-relation-associated with a prolonged QT interval. TDR serves as a functional re-entry background to maintain torsade de pointes. TDR provides a background for reentry and increases the likelihood-risk of eadEAD, the trigger for torsade de pointes, by the extension-of-extending the time window for calcium channels to be remain open. Any additional condition accelerating the reactivation of calcium channels (e.g., increased sympathetic tone), boosts-increases the risk of EAD.

Prolonged recovery from excitation increases the chance-possibility of dispersion of refractoriness, whilst-when some parts of the myocardium are refractory to subsequent depolarization. Considering-From the physiological perspectiveviewpoint, dispersion occurs during the repolarization of the three layers of the heart, and repolarization phase is prolonged in the myocardium. [Remark 4] This is the reason why T wave is usually wide and the interval from the peak of the T-wave to its end (Tp-e) represents the transmural dispersion of repolarization (TDR). In long-QT-syndrome (LQTS), TDR increases and creates a functional background of-for transmural reentry.

[Remark 1]: Please check if the edited sentence conveys the intended meaning.

[Remark 2]: Please verify technical word choice.

[Remark 3]: Please check if the abbreviation should be defined. Considering the content of the manuscript, define this as "Ventricular fibrillation."

[Remark 4]: The original statement is unclear. Please check whether you mean "dispersion occurs with repolarization between the three layers of the heart, and the repolarization phase tends to be prolonged in the myocardium."

- Comment [Crimson23]: Style:**
An abbreviation is defined at first mention.
- Comment [Crimson24]: Grammar:**
The preposition "is" was missing making the sentence awkward.
- Comment [Crimson25]: Language correctness:**
Wordiness is replaced by a more direct and accurate term.
- Comment [Crimson26]: Punctuation:**
The term "re-entry" is hyphenated.
- Comment [Crimson27]: Language correctness:**
Direct voice is used for better readability.
- Comment [Crimson28]: Language correctness:**
The original wording was too colloquial for an academic document.
- Comment [Crimson29]: Language correctness:**
This is a literary term and is not preferred in academic writing.
- Formatted:** Highlight
- Comment [Crimson30]: Subject changes:**
The unclear sentence is queried for clarity using a remark and an alternative option suggested.
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- Comment [Crimson31]: Style:**
Abbreviation defined in the first mention need not be repeated again in the manuscript according to the standard convention.
- Comment [Crimson32]: Grammar:**
The preposition has been corrected for accuracy.