3 considerations for management of QT prolongation

1. **Assess the Patient:**
   - Ask about history. Previous Torsades des Pointes (TdP) and congenital long QT are major risk factors for TdP.
   - Other risk factors include bradycardia, structural heart disease, electrolyte abnormalities, female gender, and older age.
   - Ask about symptoms. Symptoms of TdP include heart palpitations and fainting.
   - If you're concerned, enquire about these symptoms at every refill.

2. **Assess the Drug:**
   - Check the treatment. Macrolides and quinolones can cause TdP in higher risk patients.
   - Safer options include beta lactams, cephalosporins and tetracyclins. Other drugs to watch are methadone, citalopram, ondansetron and antipsychotics. See crediblemeds.org for a full list.
   - Check the dose. The risk of TdP tends to increase as higher doses are used (e.g., domperidone ≥30 mg/day).
   - Make sure the patient doesn’t have any factors that can cause a higher than expected serum concentrations, such as a drug–drug interaction or renal impairment.
   - Check the ECG. An ECG is appropriate if the patient has multiple risk factors for TdP and is prescribed a drug that prolongs the QT interval.
   - Order an ECG at baseline and after 5 half-lives when the drug has reached steady state.

3. **Recommend Action:**
   - Make a decision. Patients are at higher risk for TdP if the drug prolongs their QTc interval to >450 for males and >460 for females, or if it prolongs their QT interval by >60 msec.
   - If this happens, stop the drug if possible. If not, decrease the dose.

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2. What clinicians should know about the QT interval. JAMA 2003;289:2120-27.
4. ACC/AHA Guidelines: Prevention of Torsades de Pointes in Hospital Settings. JACC 2010;55;934-947