49 YEAR OLD WOMAN-SYNCOPE
OBSERVATIONS?? NEXT TRACING
MAY REVEAL THE CAUSE??
If you reasoned that the markedly long QT interval might result in polymorphic irregular V.T. --- "Torsades des Pointes" -- and cause syncope --- you are correct! The number of causes which can result in QT prolongation and this arrhythmia continues to increase. Add to the list the drug methadone. This woman was on a polypharmacy of medications, including large doses of methadone (240 mg/day). She required 18 emergency cardioversions in the first 24 hours and it was days after the drugs were stopped that the QT interval shortened.
<table>
<thead>
<tr>
<th>PR</th>
<th>204</th>
<th>Regular rhythm with unusual P axis, rate 94</th>
</tr>
</thead>
<tbody>
<tr>
<td>QRS</td>
<td>136</td>
<td>(RAVBB), Borderline first degree AV block</td>
</tr>
<tr>
<td>QT</td>
<td>331</td>
<td>(IVCD2), Nonspecific intraventricular conduction delay</td>
</tr>
<tr>
<td>QTc</td>
<td>414</td>
<td></td>
</tr>
</tbody>
</table>

55 YEAR OLD WOMAN-500#: C.R.F.
YOU WOULD ANTICIPATE A
LAB.VALUE OF _______??

---AXES---
P 260
QRS 33
T 60

- ABNORMAL ECG -

3094
Chronic renal failure in this corpulent lass has resulted in a K+ of 9.7. The pointed T waves identify the problem, and the QRS duration helps to quantify the K+ level.
100 YEAR OLD WOMAN-OPTIONS:
1. ? SINUS RHYTHM WITH INCREASED PR
2. ? JUNCTION RHYTHM WITH U WAVES
WHAT MIGHT PROVE THE ISSUE?

[ECG Diagram]
If you voted for choice #1 -- think again! The large wave after the T wave is a prominent U wave, in this centenarian with an accelerated junctional rhythm and hypokalemia. If this was a P wave, why didn't it appear at the arrow after the VPC? The left axis (left anterior fascicular block) was probably due to the prior septal and MI and the "missing" P wave could reflect digitalis excess.
87 YEAR OLD WOMAN-4/1
YOUR OBSERVATIONS PLEASE...

6/19-WHAT HAS HAPPENED TO THE INFERIOR WALL INFARCT?
Lead V1 shows P waves that are poorly identified in other leads (arrows). They are conducted with a long PR interval. The frontal plane QRS axis is (-) 60°, with Q waves in leads II, III, and aVF, identifying an age undetermined inferior myocardial infarction. Precordial R wave progression and transition are "poor". Ten weeks later, the QRS axis remains at (-) 60°, but there are now R waves in leads II, III, and aVF. What has happened? If there is development of left anterior fascicular block, the mean axis is shifted to the left, but "early forces" must be conducted over the posterior fascicle, and are directed inferiorly. Thus, the onset of L.A.F.B. erases the Q waves of the prior inferior MI. Obviously, without serial tracings, this sequence could not be determined.
76 year-old man 4/3
Your observations include:

The top EKG shows sinus rhythm with an age undetermined inferior myocardial infarction and an acute posterior M.I. The next day, there is evolution of a posterior lateral M.I.—but—in addition there is atrial tachycardia at 200/minute (atrial flutter) with a 2:1 AV conduction. If the rhythm is atrial flutter, the morphology is atypical since the waves are positive in leads II, III, and AVF. Of interest, their appearance in these leads simulates ST segment elevation suggesting acute inferior M.I.
41 YEAR OLD WOMAN—BEFORE YOUR FINAL DX YOU SHOULD REQUEST??

I

avR

V1

V4

II

avL

V2

V5

III

avF

V3

V6

3098
We sometimes worry about the accurate placement of precordial electrodes, but seldom consider accurate placement of the heart! This woman has advanced hyperinflation lung disease and her heart accompanies the low-lying diaphragm. The top tracing is consistent with age? anterior myocardial infarction. When the precordial leads are placed lower than normal -- a "precordial map" -- the R waves reappear in leads V1-3 and remove the evidence of the MI.