Questions?
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33 year old man in the E.D.

Your diagnosis and treatment?
Dr. Jim Davia (U-Va) provided this tracing and the story. The diagnosis provided in the E.D. was atrial fibrillation (correct). In treatment he was given adenosine -- 6 mg; then 12 mg; and then verapamil with no response (A). He was then given 18 mg adenosine with the result shown in (B). He was shocked from ventricular fibrillation and the post conversion tracing (C) showed what should have been evident -- this young man has “WPW” -- an accessory pathway that transmits the stimuli of atrial fib. with a characteristic irregular, wide, and bizarre tachycardia resulting. Appropriate therapy should be immediate cardioversion, not AV nodal blocking drugs!
August 8th - Your observations include?

August 9th - Why may LAFB simulate MI?
The top tracing shows left axis deviation of (-) 50° with preserved R waves in leads II, III and aVF, due to left anterior fascicular block. The precordial leads lack initial R waves in V1-V3 consistent with an anterior MI. An interesting thing develops the next day. The QRS duration is less. The frontal axis has shifted from (-) 50° to (-) 15° and no longer shows left axis. The absent R waves in V1-V3 have now returned. Why should this be? Recall that the left anterior fascicle “wants to” direct early forces anteriorly, but is opposed by the posterior fascicle. In its absence (temporary or permanent LAFB) the unopposed left posterior fascicle becomes dominant and can shift the initial forces in a posterior direction, stimulating an anterior MI. When the left anterior fascicle conduction returns, the apparent myocardial infarction disappears.
Tracing 3

Kindly make some observations on this tracing.

37 Year old man
Drug overdose
A sad story. Over the course of several days, this young man repetitively smoked “crack” cocaine. The resulting “high” prevented sleep, so he attempted to “come down” by taking a large dose of morphine.

He quickly slipped into the arms of Morpheus, and it wasn’t until he stopped breathing that his friend became concerned and called EMS. He was intubated in the field but was “brain-dead” on arrival at the hospital. The ladder diagram depicts his rhythm disturbance.

An accelerated junctional focus is competing with sinus rhythm. The rates of the two are virtually identical, and the rhythm represents so-called *isochronic* A-V dissociation. The accelerated junctional discharge was probably due to the sympathomimetic effect of cocaine.
Tracing 4

49 year old woman

E.D.---“Overdose” --Consider??

- Normal sinus rhythm, rate 90
- Consider left atrial enlargement
- Nonspecific Anterolateral region T wave abnormalities

- ABNORMAL ECG -

--- AXES ---
P  -30
QRS  53
Do you really think that the computer’s measurement of the QT interval is accurate to the third decimal point? In this example, instead of being 0.381 sec., the more accurate QT measurement is 0.48 sec. (corrected QT = 0.60 sec.) Obviously, the prolonged recovery interval is a major concern. Subsequently, it was learned that she had taken an “overdose” of Thorazine.
May 2018

88 Year old woman

Tracing 5

Rhythm?
The FLB's represent:
1. Pernicious PVCs??
2. Simply Singultus??
The underlying rhythm is atrial flutter with variable AV conduction. The startling FLB’s are due to the forceful chest movement of “hiccups” (more precisely, in medical parlance, known as “singultus”) Stay alert!!
December 6th

"Hyperacute T waves" maybe due to? They often presage??
December 6th

"Hyperacute T waves" maybe due to?
They often presage??

December 9th - Did they??

Some of medical parlance would probably be unacceptable to a professor of English..... “Hyperacute” is a term that should mean--more acute than acute--but we understand it indicates that the remarkably tall T waves in V 2-4 portend an acute anteroseptal myocardial infarction--and that is what developed!!