

Myocarditis and Pericarditis after mRNA vaccines



19 yo male, chest pain onset 2 days after second Pfizer

“Central chest pain onset this afternoon. Concerned due to having second dose of pfizer vaccine recently. No exacerbating or relieving factors, onset at rest. Nil cardiac hx. Pain 8/10 post panadol. Alert, orientated, mobile” Status: ED-Inpatient Ward/Unit

Troponin Cumulative

Number	4	3	2	1	Ref. Range (Units)
Collected	02-Oct-21 06:35	01-Oct-21 07:10	30-Sep-21 21:15	30-Sep-21 19:30	
Source	PATHNTH	PATHNTH	PATHNTH	PATHNTH	
Troponin I	** 161	** 427	** 345	** 260	< 26 (ng/L)

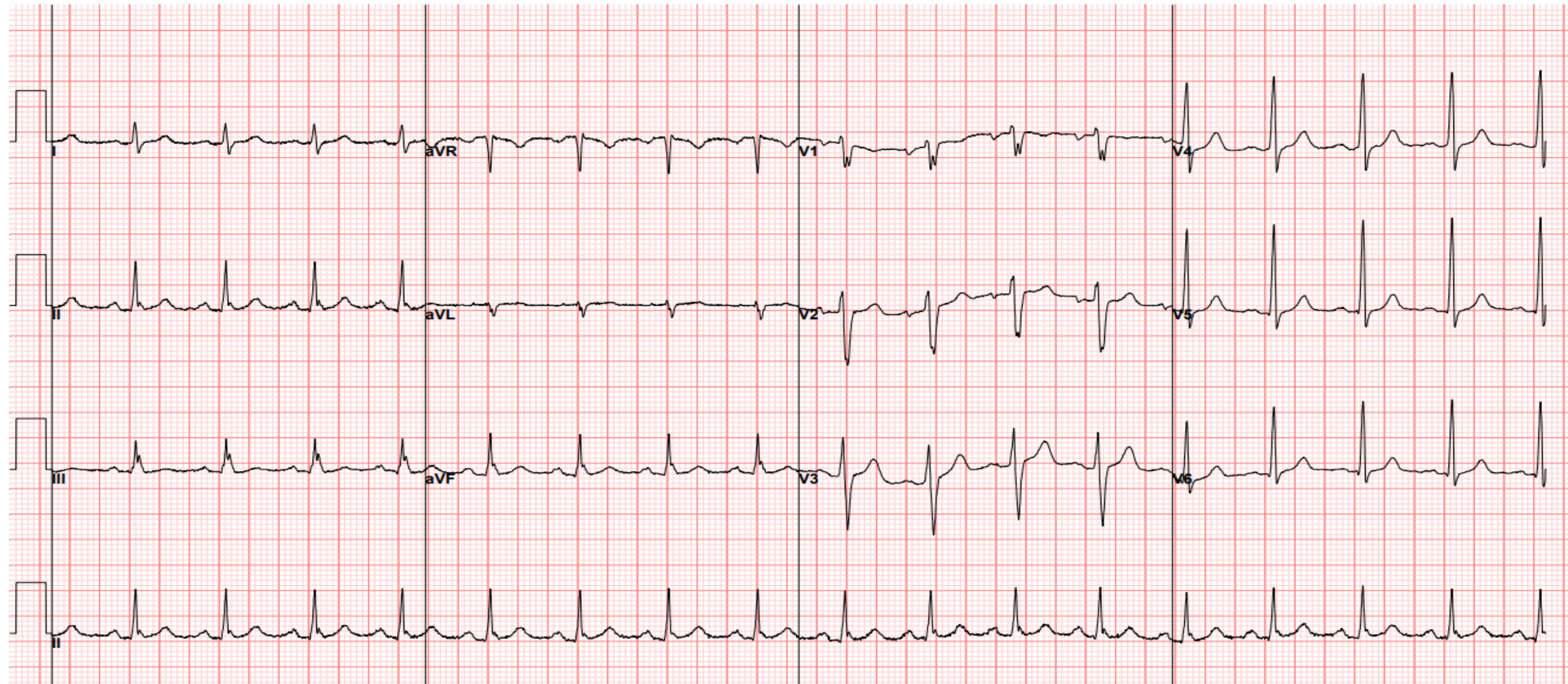
* Abnormal ** Critically Abnormal § Units or Reference Range differs

Second ID:
DOB: 11-Oct-2001 0 Hours(s)
Male Other
Loc.:
Tech:
DX:

Vent Rate: 102 BPM
PR Int.: 152 ms
QRS Dur.: 102 ms
QT/QTc: 326 / 400
P-R-T Axes: 71 74 48

UNCONFIRMED

Referred By:

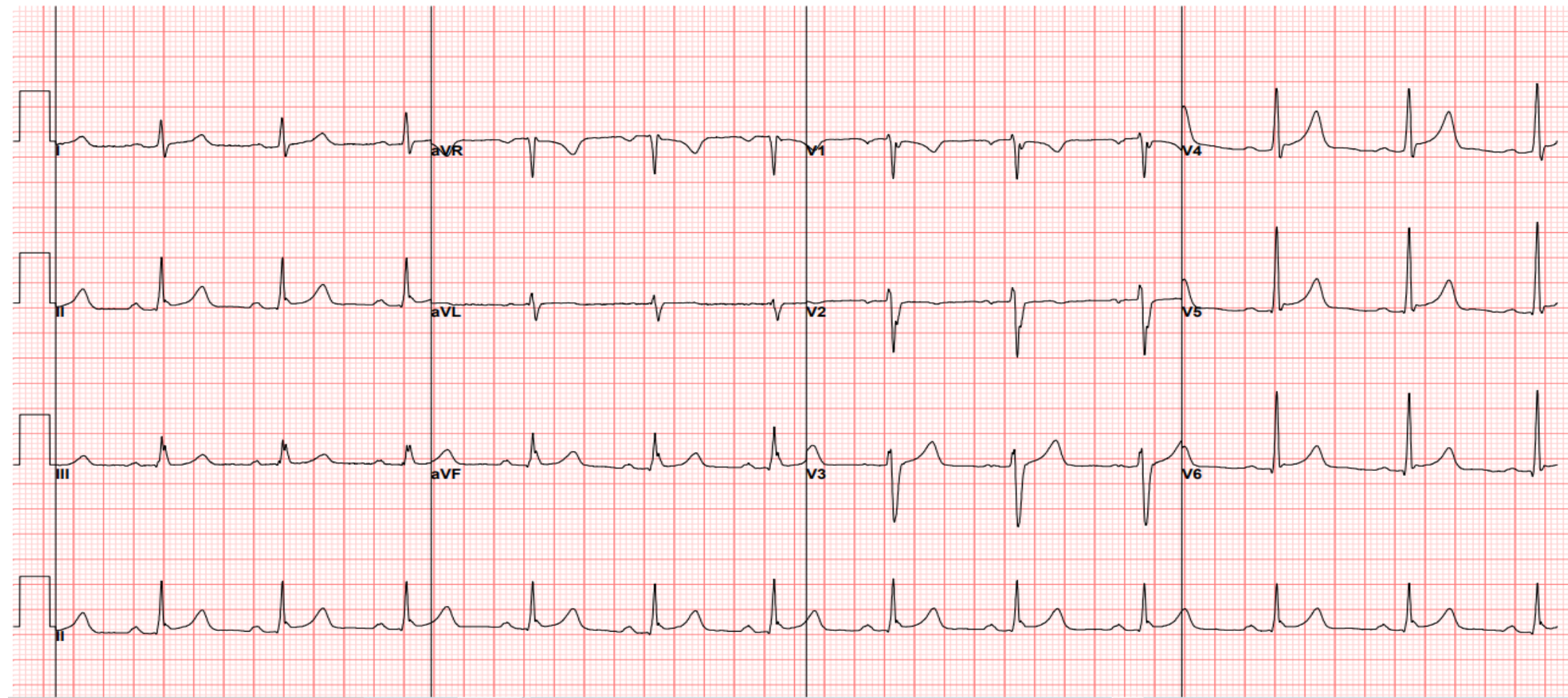


Second ID:
DOB: 11-Oct-2001 0 Hours(s)
Male Other
Loc.:
Tech:
DX:

Vent Rate: 72 BPM
PR Int.: 178 ms
QRS Dur.: 104 ms
QT/QTc: 408 / 429
P-R-T Axes: 63 61 55

UNCONFIRMED

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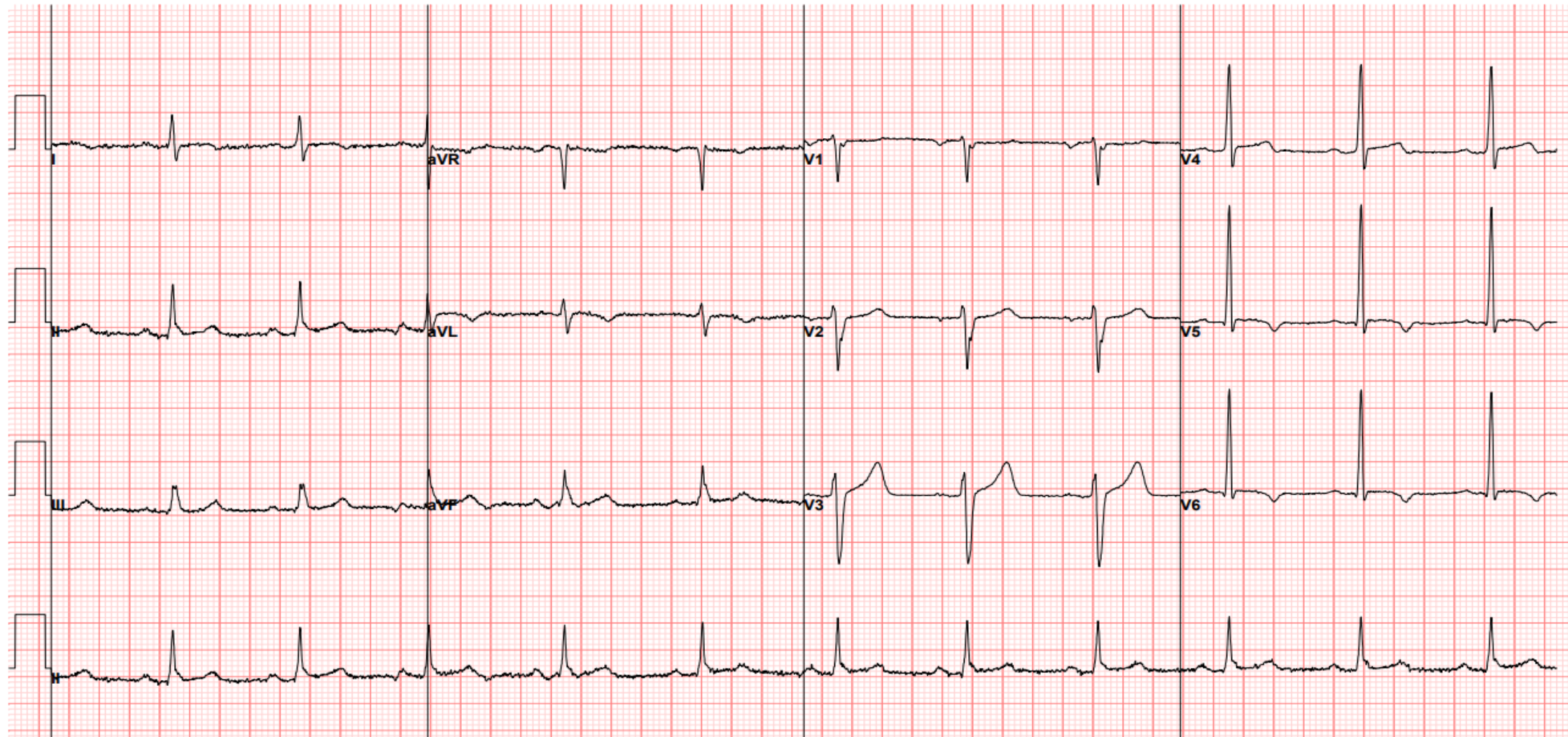


Second ID:
DOB: 11-Oct-2001 0 Hours(s)
Male Other
Loc.:
Tech:
DX:

Vent Rate: 68 BPM
PR Int.: 180 ms
QRS Dur.: 106 ms
QT/QTc: 418 / 432
P-R-T Axes: 61 64 95

UNCONFIRMED

Referred By:



Take home points

1. Benign early repolarization in teenage boys can be mistaken for pericarditis, here **serial ECG** is helpful
2. Echocardiogram is helpful once a diagnosis has been made, but has low clinical utility making the diagnosis
3. Myocarditis / Pericarditis are more likely after the second dose (is Boston paper 4 after 1st, 16 after 2nd)
4. It would be good for the reporting to the AEFI to know whether it's a point of care troponin machine and whether the point of care machine measures troponin I or t (i-stat machine for example use)
5. Aspirin or NSAIDS such as nurofen regularly for 1-2 weeks until symptoms resolve
(The evidence for colchine is not for these case, but for recurrent pericarditis (COPE, and CORE trials))
6. Please consult with Jascha and I for suspected cases in the paediatric population