

STEMI and Left Bundle Branch Block

(See Demo-8-1)

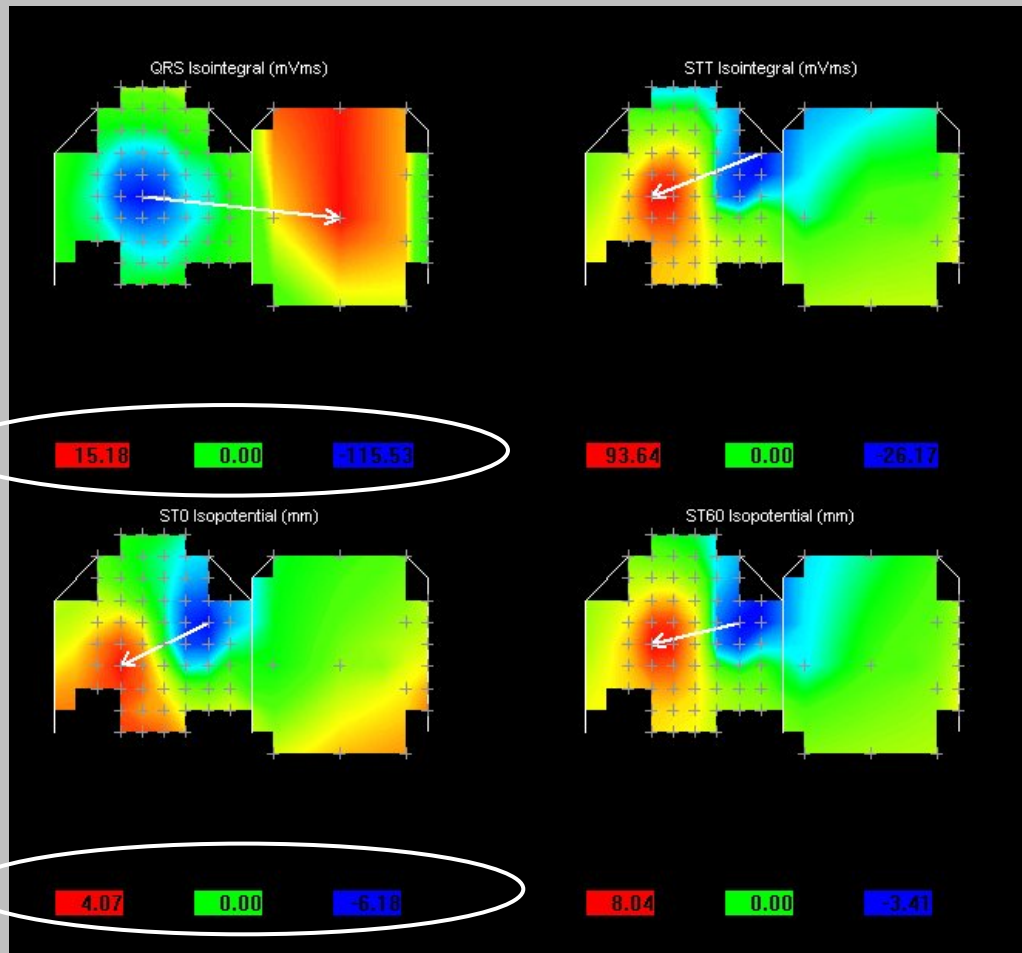
STEMI and Left Bundle Branch Block: the 12-lead picture



V leads are swamped by deep, wide QRS of LBBB

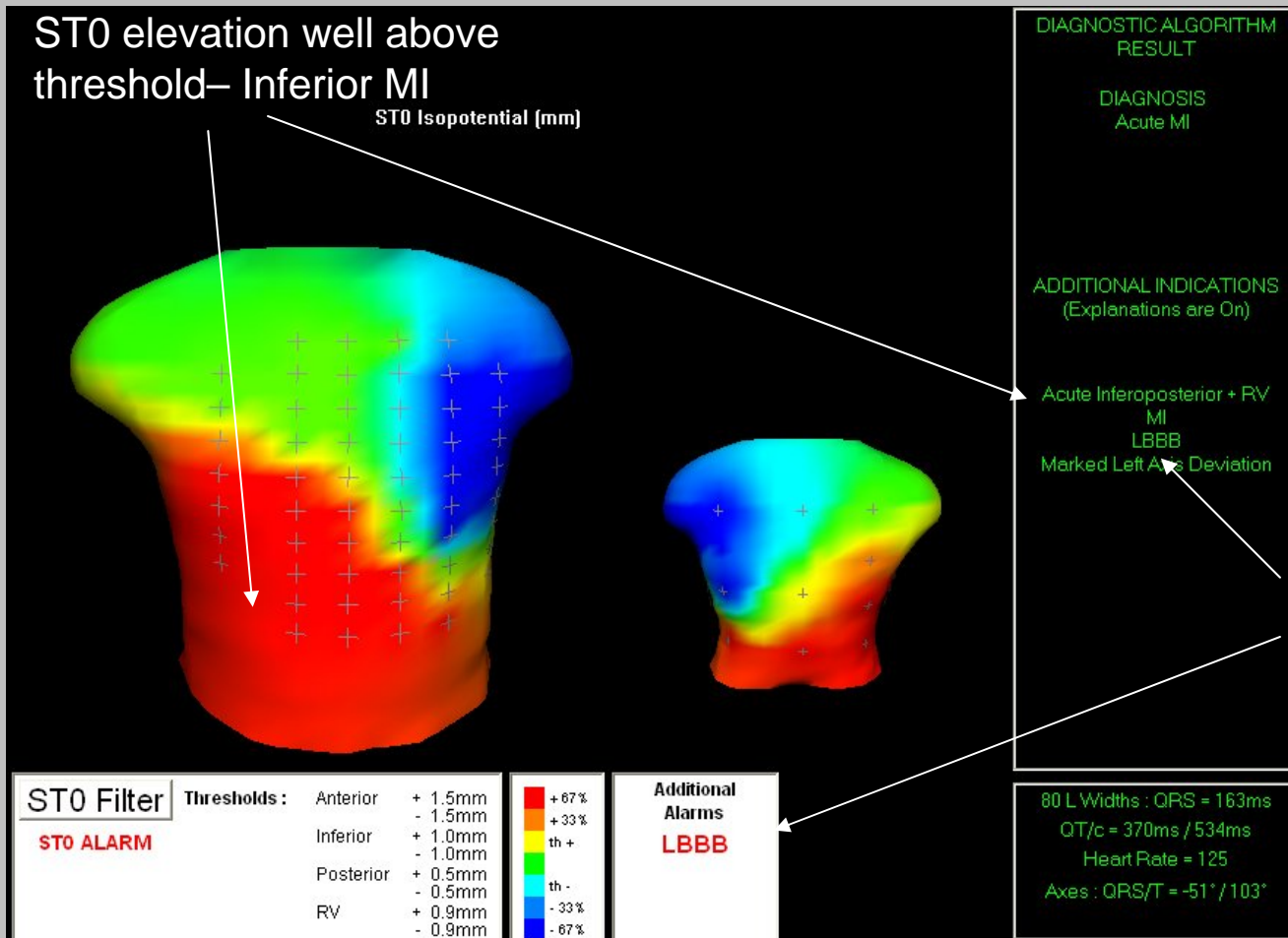
First clues

Range +15 to -115, way outside the normal +/-50. Caused by the conduction problem (LBBB)



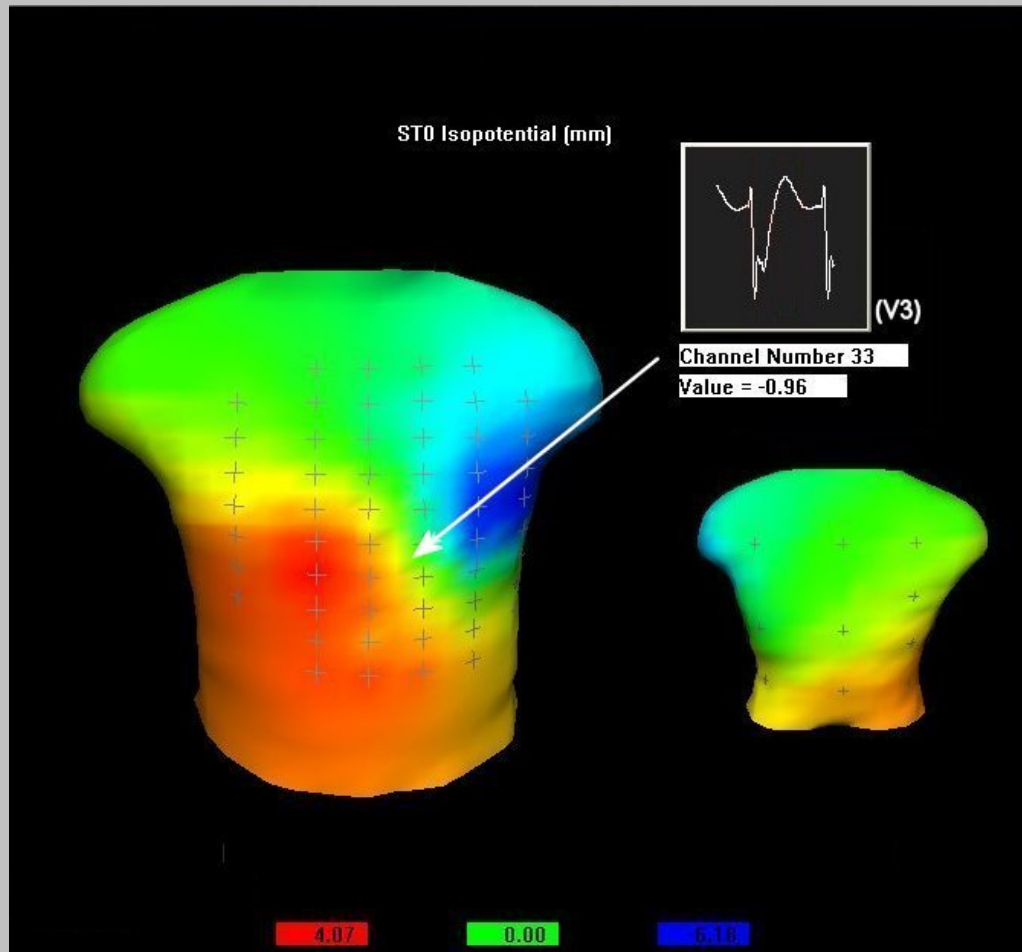
ST Elevation of 4 mm in inferior region

ST0 Filter map



LBBB warning

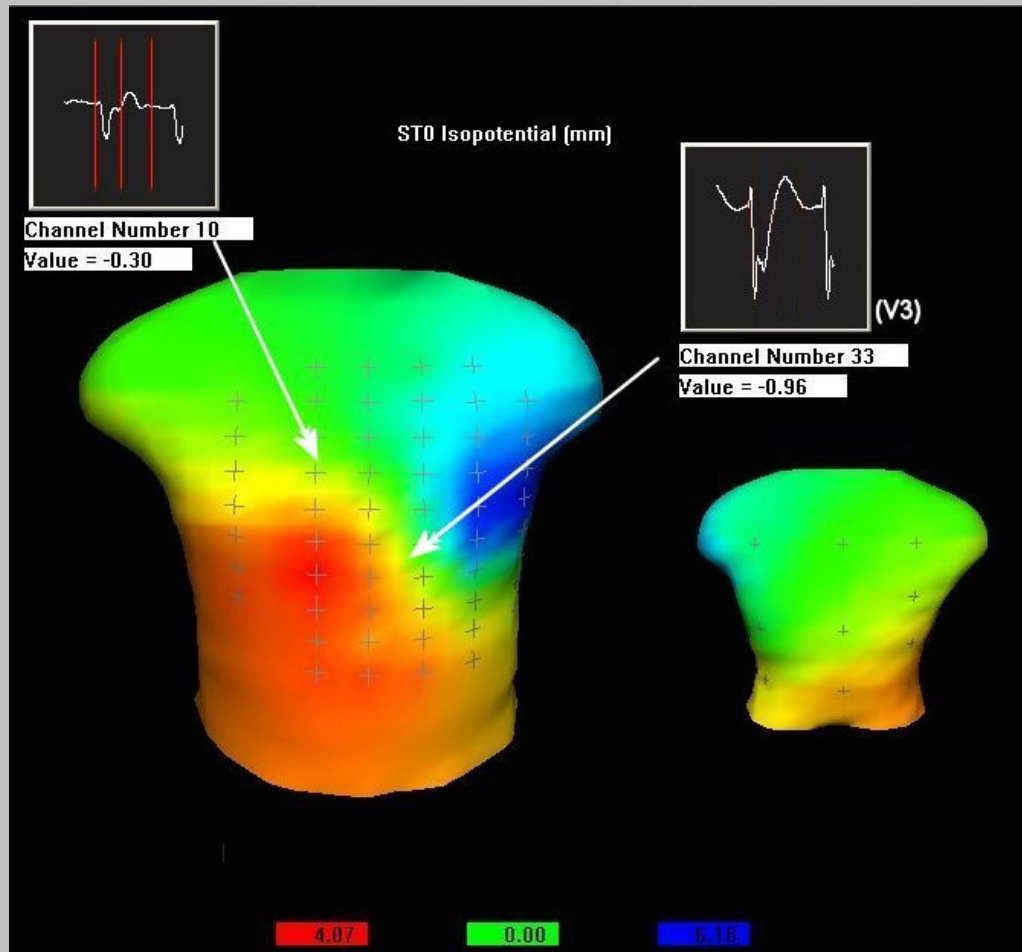
How it is done: the 80 lead spatial advantage



12 lead area swamped by LBBB complexes, unable to tell position of ST0 (J point)

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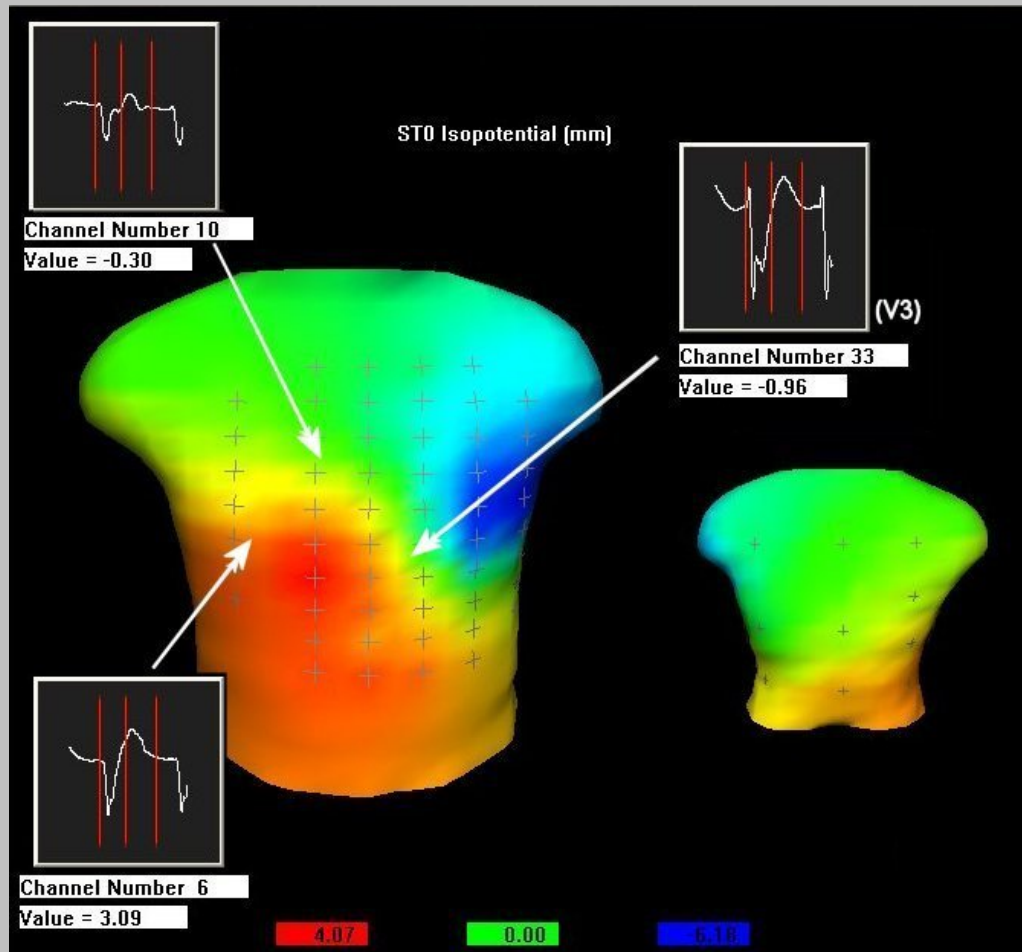
ECG from unaffected area sets ST0 (J point), the middle marker



12 lead area swamped by LBBB complexes, unable to tell position of ST0 (J point)

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Now see true ST0 elevation – Inferior MI

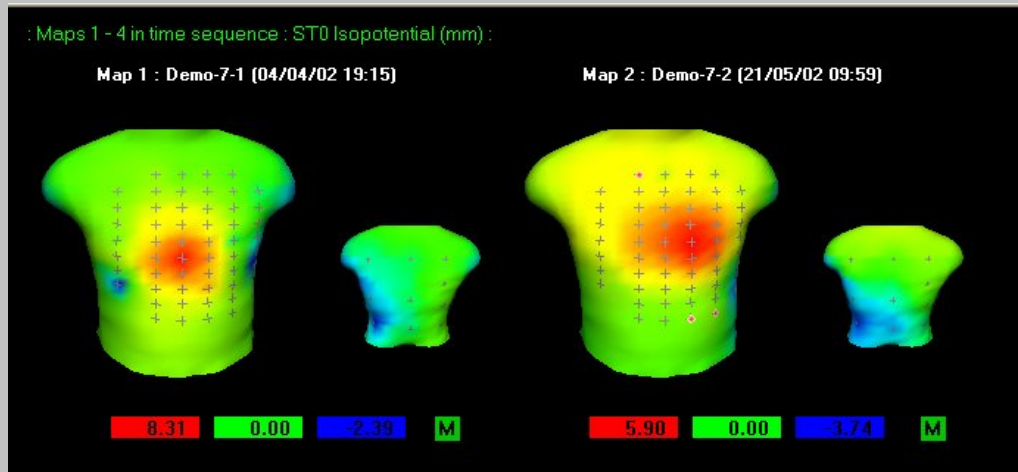
Now a comparison of
LBBB without MI (Demo7-1, 7-2)
with
LBBB with MI (8-1 & 8-2)

The next slide shows their ST0
maps side by side

LBBB and MI

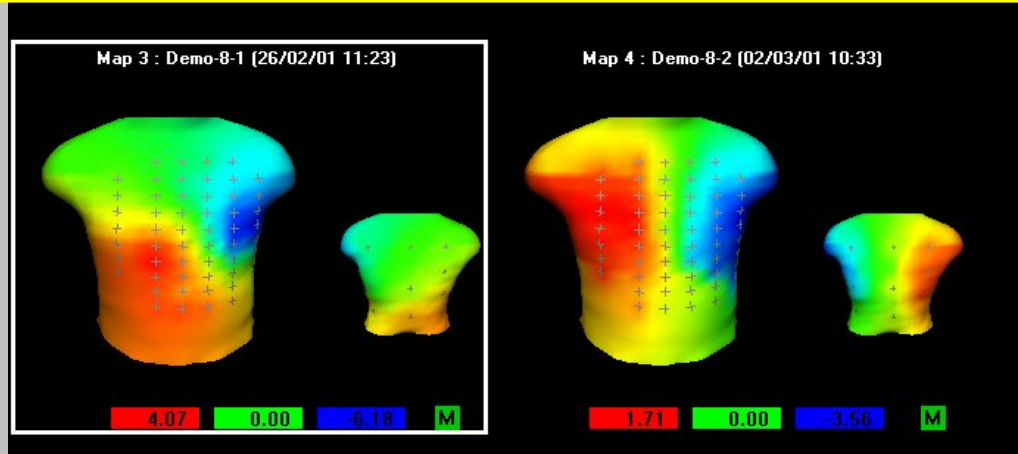
LBBB without MI

Tight spot of ST elevation in 12 L area from deep/wide QRS of LBBB



LBBB with MI

ST Elevation is more diffuse and outside of the central Anterior region from the STEMI



Summary

- Ensure that ST0 (J point) marker position is set by ECG morphology from an area outside the zone affected by the LBBB (usually top right anterior area)
- Any ST Elevation in inferior, RV, posterior region is indicative of potential MI

The End