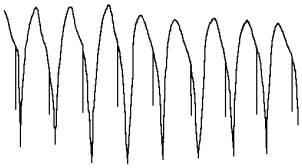
PACING AT AN ALTERED RATE

A patient with a DDD pacemaker shows pacemaker-mediated tachycardia.

Tachycardia with pacemaker spike preceding each QRS complex.



CAUSES AND (CORRECTIONS)

Retrograde conduction through AV node which depolarizes atria and triggers a rapid heart rate.
(reprogram pacemaker)

DIAPHRAGMATIC PACING

Muscles of the diaphram are stimulated by the pacemaker.

Patient hiccups in time to pacemaker spikes.

The shape of the QRS complex of the paced beat becomes positive.

CAUSES AND (CORRECTIONS)

Myocardial perforation by pacing electrode.
(reposition leadwire)

Output setting on a temporary pacemaker is too high.
(decrease output setting)

ASSESSMENT OF PACEMAKER FUNCTION IN DEMAND MODE

1. **Are all pacer spikes capturing?**
2. **Do all successively occuring pacemaker spikes occur at precisely the same rate?**
3. **Try to determine the spontaneous (or underlying) rhythm.**
4. **Is the pacemaker inhibited by a faster rhythm?**
5. **Does the pacemaker "take over" when spontaneous beats slow down?**
6. **Evaluate unexplained phenomena last.**

BEST MONITORING LEAD

Use lead I (MCL1) to monitor a patient with a pacemaker.

The QRS morphology of the paced beat in this lead should be negative - as in left bundle-branch block.