

## Cannon 'A' waves during complete atrioventricular block

### *Atriyoventriküler tam blokta dev A dalgası*

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Examination of the venous pulse can indicate the presence of atrioventricular (AV) dissociation, as cannon waves in the venous pulse indicate atrial contraction during ventricular systole. Presence of cannon waves and bradycardia is an indication of complete AV block, while presence of tachycardia and cannon waves indicates ventricular tachycardia or nodal reentrant tachycardia. An 83-year-old

patient was admitted to the emergency ward due to syncope. Complete AV block was noted, and a temporal ventricular pacemaker implanted via the femoral vein. Pacemaker was set to 70 beats per minute in VVI mode. Intermittent cannon A waves were observed during temporary VVI pacing (Figure, Video 1\*). The waves occurred during ventricular systole, when the atrium contracts against a closed tricuspid valve, explaining the intermittent presentation. The waves were relatively easy to detect, due to faster temporal ventricular stimulation during AV dissociation. Cannon A waves may occur during complete AV block, ventricular tachycardia, or premature ventricular contractions.



**Figure**— Intermittent cannon A waves observed during temporary VVI pacing. \*Supplementary video file associated with this presentation can be found in the online version of the journal.