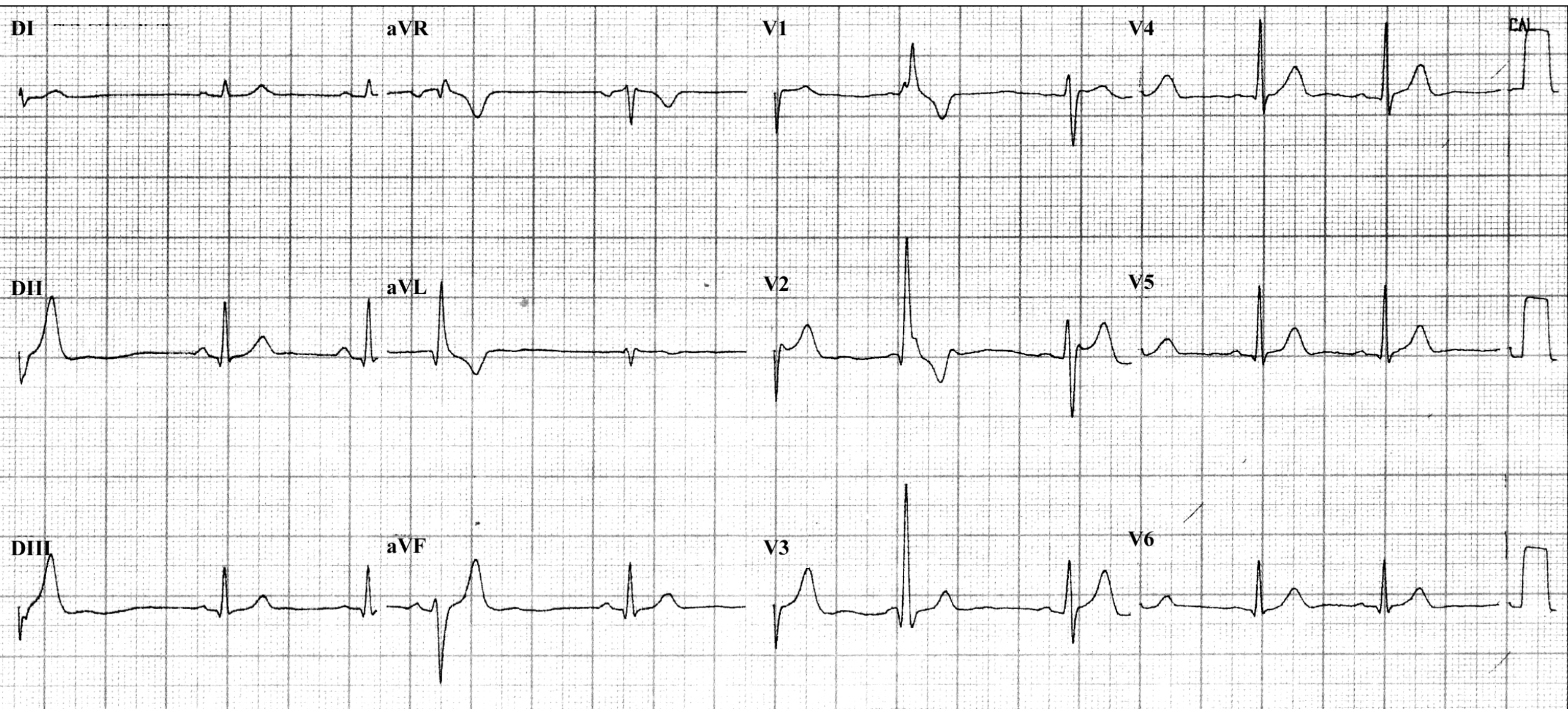
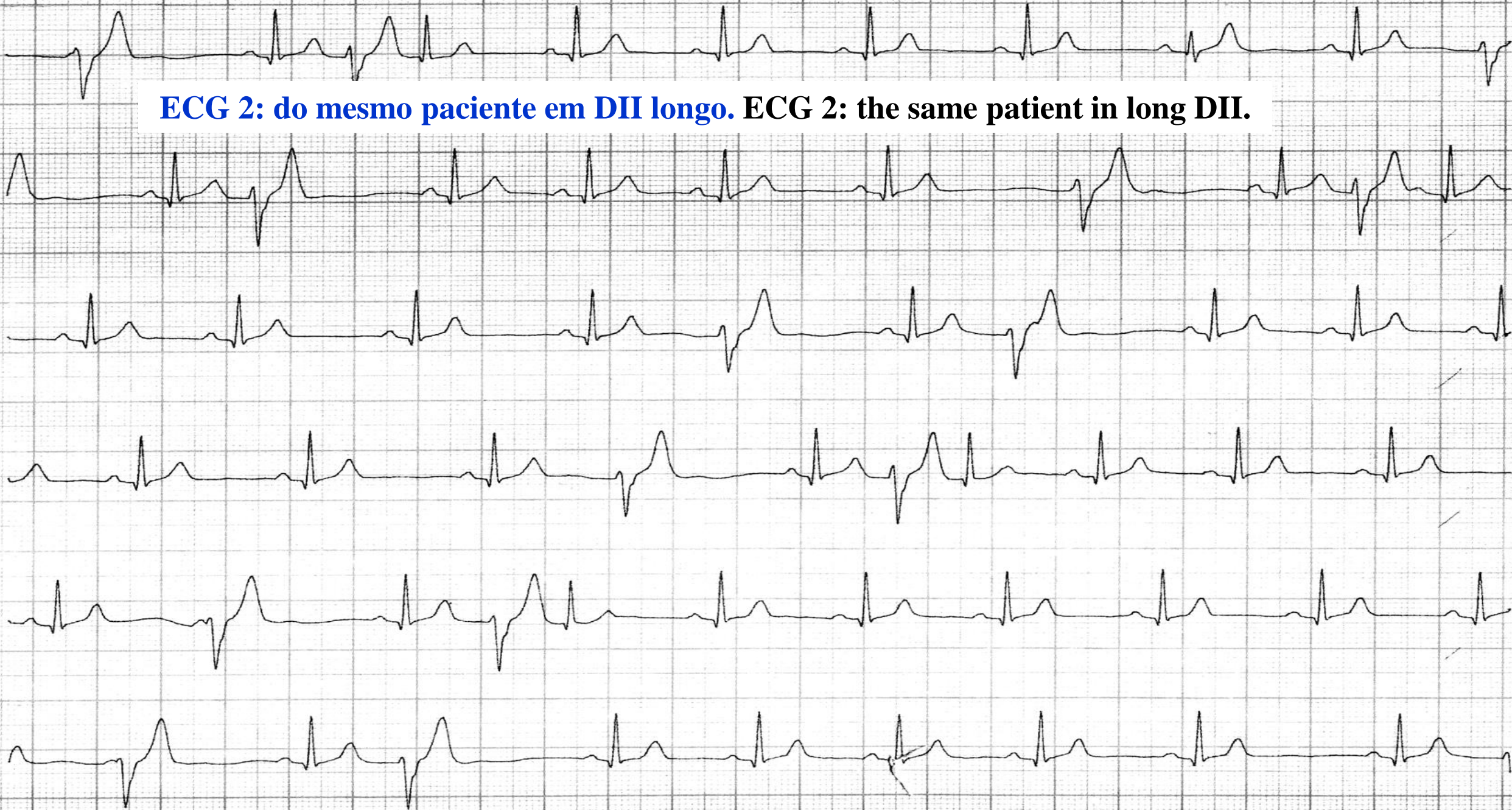


ECG 1: Qual o diagnóstico? e porque? ECG 1: What is the diagnosis? and why?



ECG 2: do mesmo paciente em DII longo. ECG 2: the same patient in long DII.



Prezado Maestro Andres

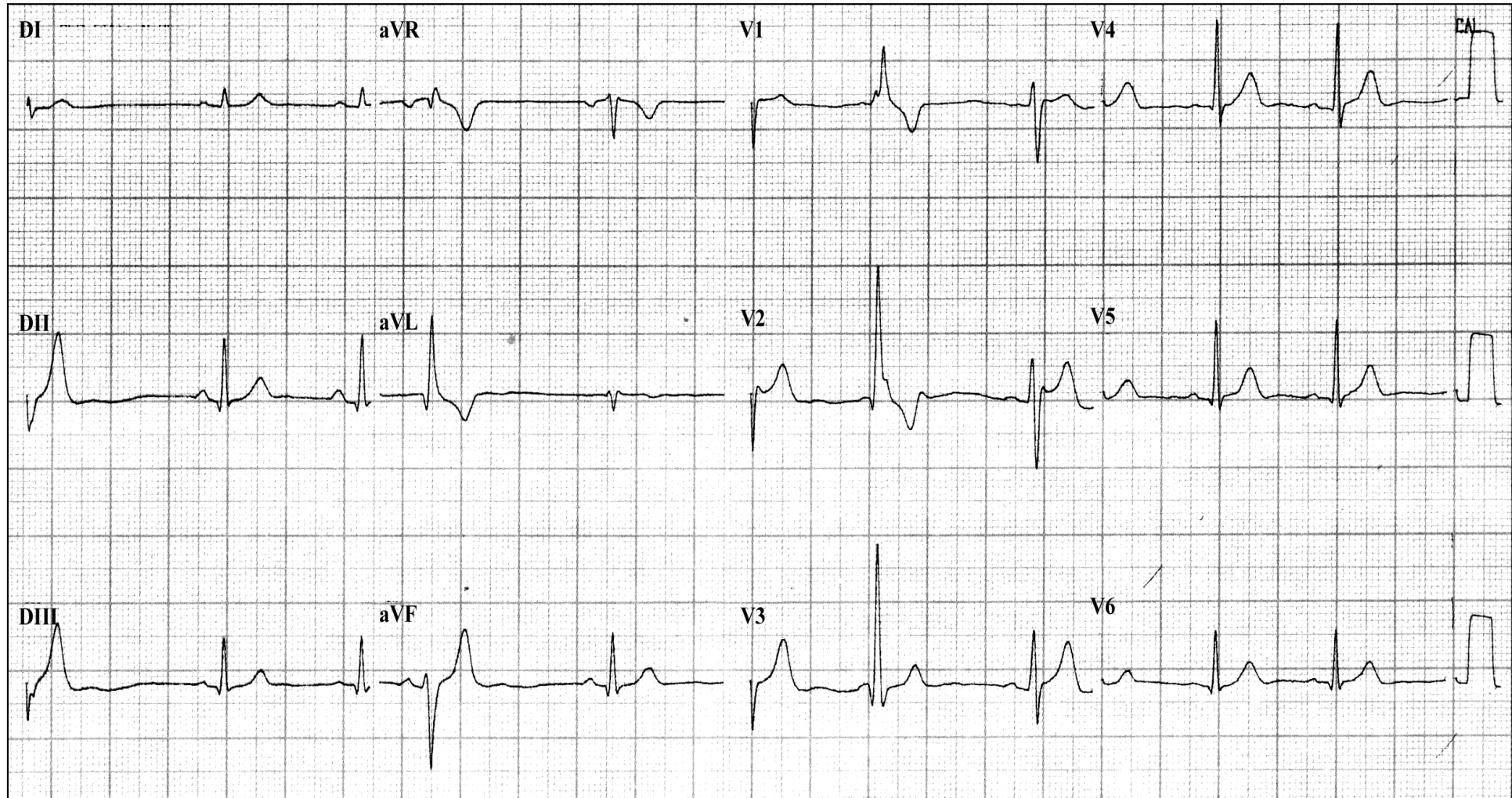
Parece-me fenômeno de Ashman, embora mais comum em fibrilação atrial. Anexo o Ecg explicativo: aumento do ciclo seguida de batimento com ciclo curto e padrão de BCRD significando bloqueio na rama esquerdo por estar em período refratário. Correto?

Bom fim de semana

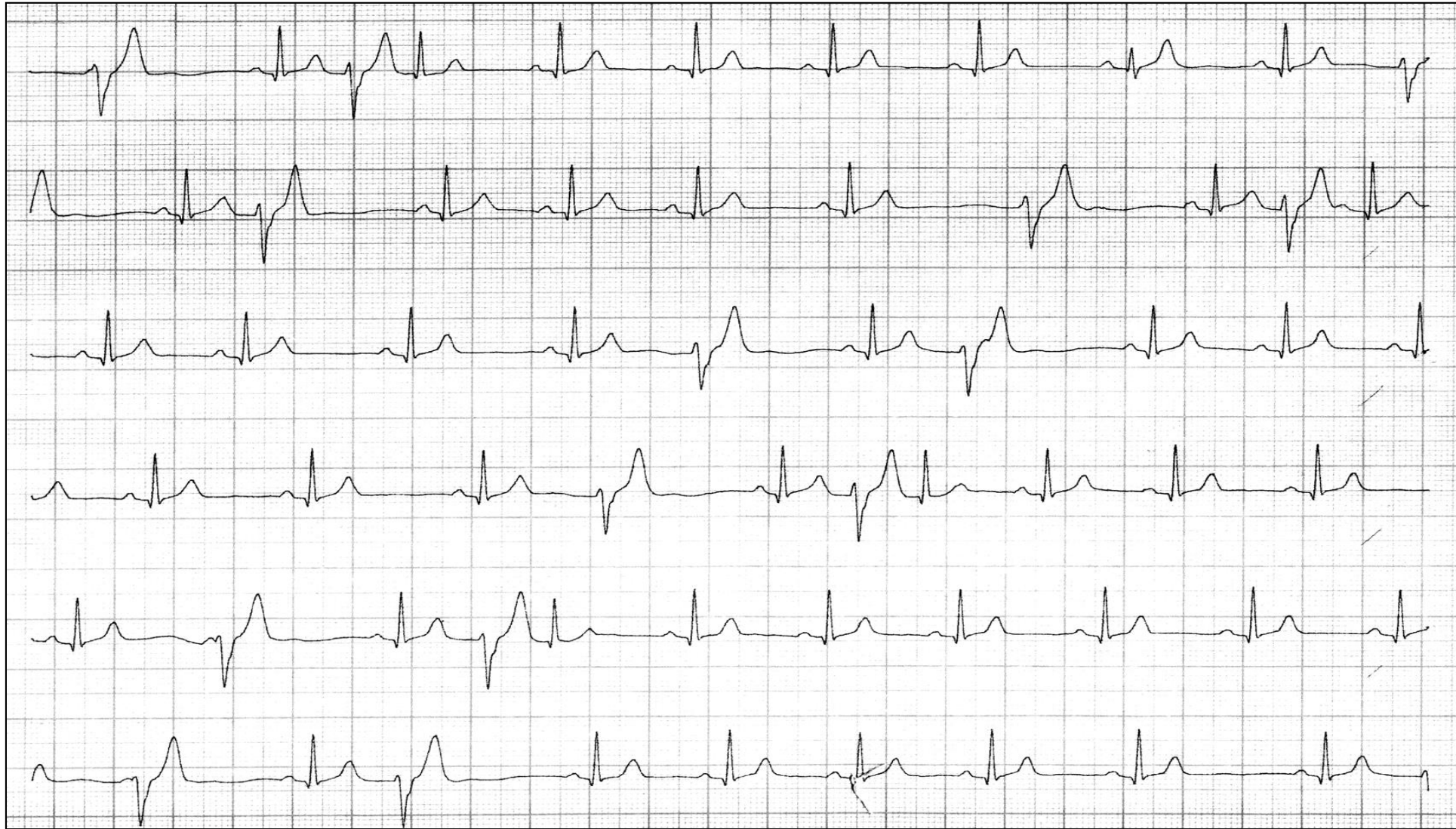
Adail

Final diagnosis

ECG 1: ventricular ectopic events that suggest monomorphic premature ventricular contractions.

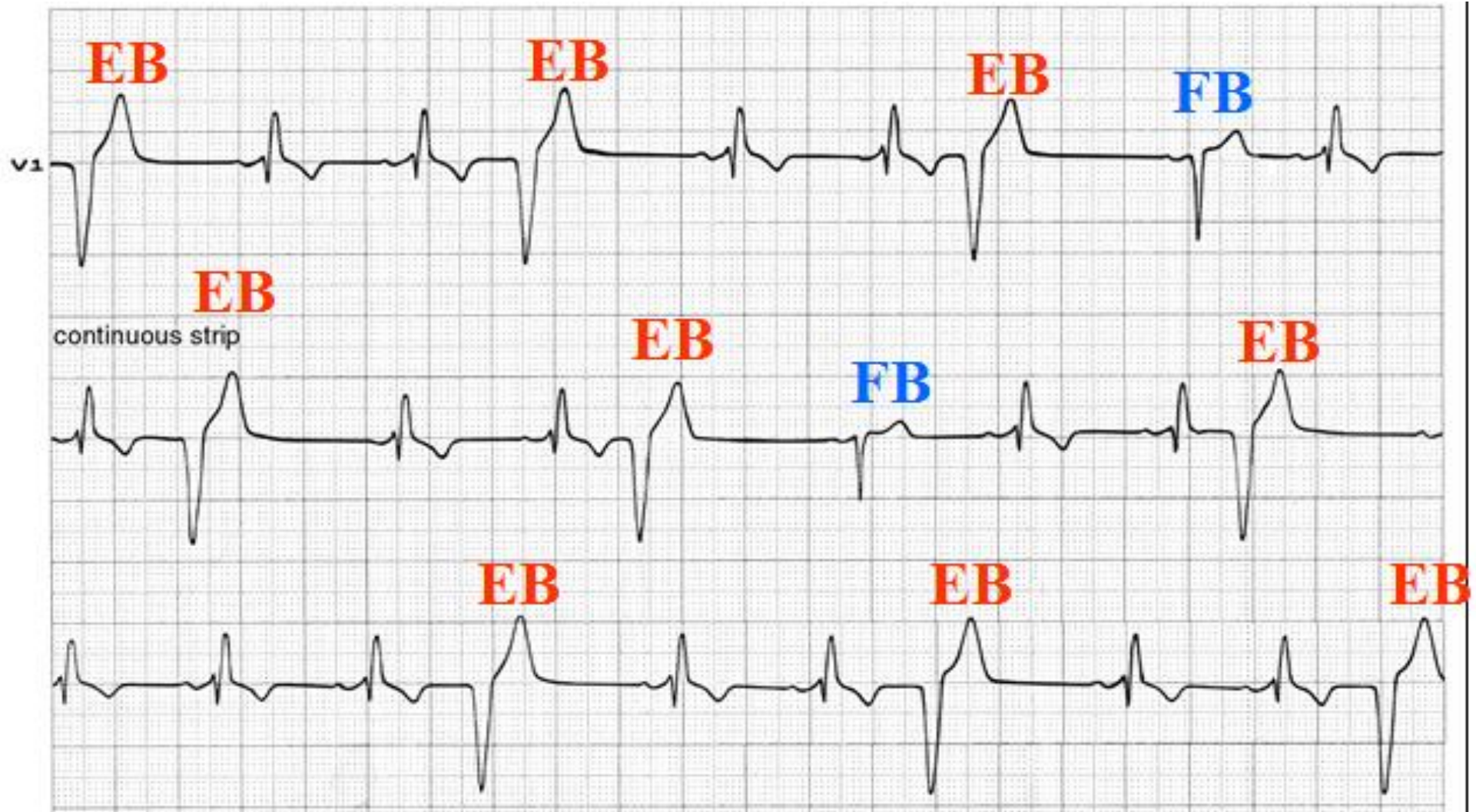


ECG 2: the same patient in a continuing recording in the prolonged II lead.



Monomorphic ventricular beats with variable couplings that are repeated in multiple intervals to each other: parasystole.

Parasystole



ECG diagnosis: SR conducted with CRBBB and complicated with ventricular parasystolic rhythm.

The tracing presents all the characteristics of parasystole:

- 1) Ectopic beats with CLBBB morphology (EB) with variable coupling;
- 2) The narrow beats are fusion beats (FB). The normal beat has CRBBB morphology;
- 3) The mathematical analysis of interectopic intervals shows a common multiple.

Parasystole concept

Concept: arrhythmia resulting from the presence of two (rarely more) independent pacemakers within the heart, while one is “protected” from the impulses of the other.

A pacemaker is generally located in the sinoatrial node and another ectopic focus is generally ventricular (rarely junctional or atrial).

The diagnosis is based on three electrocardiographic facts:

- ✓ Variable couplings (this distinguishes it from premature contractions);
- ✓ Presence of fusion beats;
- ✓ Constant and multiple inter-ectopic intervals.

Ventricular Parasystole

Non-fixed coupled PVCs where the inter-ectopic intervals (i.e., timing between PVCs) are some multiple (i.e., 1x, 2x, 3x, . . . etc.) of the basic rate of the parasystolic focus.

PVCs have uniform morphology unless fusion beats occur.

Usually *entrance block* is present around the ectopic focus, which means that the primary rhythm (e.g., sinus rhythm) is unable to enter the ectopic site and reset its timing.

May also see *exit block*; i.e., the output from the ectopic site may occasionally be blocked (i.e., no PVC when one is expected).

Fusion beats are common when ectopic site fires while ventricles are already being activated from primary pacemaker.

Parasystolic rhythms may also be seen in the atria and AV junction.