

# Colonoscopy-induced transient Mobitz type I block

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## INTRODUCTION

- Propofol is a commonly used anesthetic in endoscopic procedures.
- It can prolong the AV conduction through vagal stimulation leading to AV block.
- We report a unique case of a healthy female undergoing a routine screening colonoscopy who developed a Mobitz type I block, in which propofol was the sole agent used for sedation.

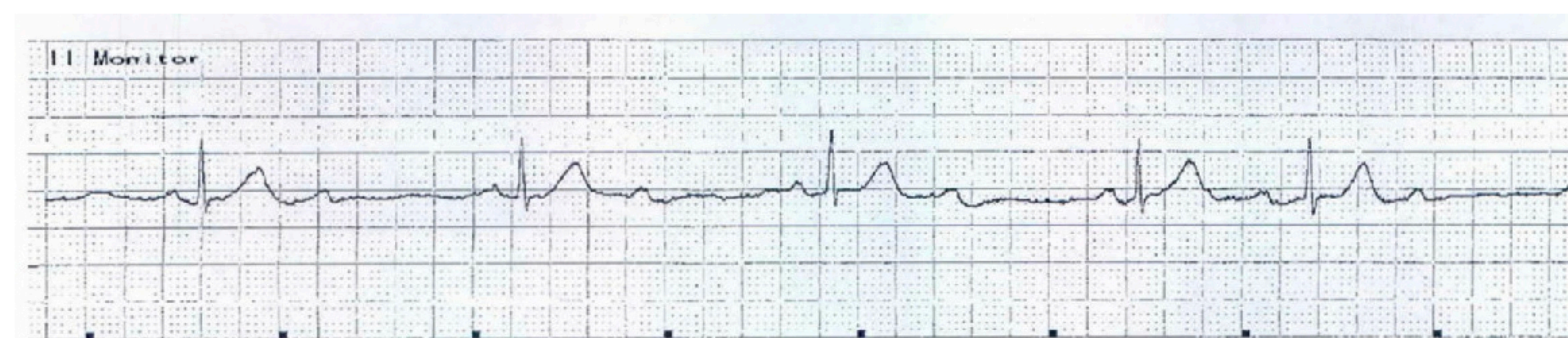
## CASE PRESENTATION

A 74-year-old-female presented for a routine colonoscopy which was performed under monitored supervised propofol sedation.

During the final phase of the procedure, which was performed with minimal air insufflation, she was observed to have a transient 2:1 heart block mixed with periods of 3:2 heart block. She reported no cardiac or neurological symptoms.

Review of the EKG showed lengthening of the PR interval consistent with Wenckebach (Mobitz type I). This resolved post procedure and all labs were normal. She was referred to cardiology.

A 14-day Holter monitor showed 22 asymptomatic episodes of supraventricular tachycardia with longest being 26. Echocardiogram was normal. The incident was deemed to be a vagal effect due to probe being in the colon/rectum and effects of propofol. She has not had any reoccurrence and remains asymptomatic.



**Figure 1.** An electrocardiogram showing Wenckebach (Mobitz type I block).

## DISCUSSION

- Propofol can prolong the AV conduction system leading to heart blocks.
- The suggested mechanism is hypervagal stimulation causing slow sinus rate, prolongation of stimulus to bundle of His interval, lengthening of Wenckebach cycle and effective refractory period.
- While air distention in stomach or colon can result in a vasovagal reaction and bradycardia, cases of normal block in this situation are extremely rare.

## REFERENCES

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