Sinus Node Dysfunction: A Rare Side Effect of Tigecycline

Mukta Agarwal¹, Divendhu Bhushan²
Assistant professor, department of obstetrics and gynaecology, All India Institute of Medical Sciences, Patna, Bihar; Senior consultant, Department of Internal Medicine, PARAS HMRI, Patna, Bihar

Drug induced arrythmias are a common problem. Mostly these arrythmias are not life threatening. Tigecyclin is a tetracyclin derivative extending its gram positive and gram negative coverage. It is indicated in complicated intraabdominal infections, community acquired bacterial pneumonia and complicated skin and soft tissue infections.

Here we are reporting a case in whom tigecyclin causes symptomatic bradycardia.

A 56 yr old female, having no chronic illness in past diagnosed ovarian malignancy. She was operated and in post op period she developed fever. On urine culture E. Coli was grown sensitive to tigecyclin and colistin only. Tigecyclin was started. Her fever responded in 48 hours, but on 7th dose of it, she developed bradycardia on monitor. ECG shows sinus node dysfunction (atrial bigemny) with ventricular rate of 75/ mins. (Figure 1).

Her blood pressure remains normal in supine but postural drop recorded. Her serum sodium, potassium, calcium and ABG were normal. She was advised fluids and inj atropine given but not responded. As this follows inj tegicyclin we hold the medicine. She was shifted to icu. Her pulse rate remain 40-50/ mins for 36 hours after last dose of tigecyclin. After this gradually her heart rate pick up to normal and on holter monitoring no such arrythmia or sinus pause detected.

Tigecyclin is a glyicyyclin that inhibits protein synthesis of bacteria. It is a bacteriostatic medicine metabolized by glucornidation in liver and excreted in faeces. No modification needed in renal failure and adjustment required in severe hepatic failure.

Common side effects are gastrointestinal. (1) Less common side effects are hepatic dysfunction, pruritis, increased prothrombin time and acute pancreatitis. (2) Although in the monograph of the tigecyclin it is claimed to have irregular heart rate as a side effect, our case shows well documented symptomatic sinus node dysfunction. It can be dose dependent side effect. Further large studies needed to confirm our finding.

Beware of less common side effects of therapeutic agents as they can be life threatening and may need futile extensive workup.

References
