

REPLY TO THE EDITOR

Reply to the Editor — Maternal inappropriate sinus tachycardia during pregnancy

We would like to comment on the letter by Wang on our article.¹ He acknowledges that we used the standard accepted definition of inappropriate sinus tachycardia (IST) but raises the issue of whether an alternative definition of IST should be used during pregnancy. Indeed, recent data in pregnant women show that the median heart rate was 82 beats/min at 12 weeks' gestation and rose to 91 beats/min at 34.1 weeks.² However, the average heart rates in our patients, mostly recorded in the early second trimester, were typically more than 100 beats/min, and more importantly, they were highly symptomatic with the added history of rapid and marked increases in heart rate during exertion, a classic presentation of IST. They were referred for further evaluation because their physicians considered them to have something other than the usual mild increase in heart rate with pregnancy.

Wang comments on the use of metoprolol to treat these very symptomatic patients, and suggests that the data on its effectiveness in nonpregnant patients remain questionable. The senior author (E.N.P.) has a different experience and has treated scores of IST patients prior to ivabradine availability with substantial success in many using metoprolol succinate. The limiting factor for success is often the inability to use a high-enough dose because some of these patients simply cannot tolerate beta-blockade therapy even at a low dose. Further, it is our experience that volume expansion and use of salt supplementation, while valuable in autonomic syndromes of hypotension, are not effective in pure IST without hypotension. Last, although one would like to avoid the use of any drug during pregnancy, metoprolol is considered safe to use if needed,³ and all our patients were treated

beyond the first trimester. Risks and benefits of therapy were discussed during the shared decision-making process, and all patients wanted to take metoprolol to suppress their marked symptoms.

We agree that more data on IST in pregnancy, and the safety of ivabradine, would be useful and encourage others to investigate this problem.

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Authorship

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