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Ten Additional Cases of Atrial Fibrillation Triggered by the Sequence of Strenuous Exercise and Cold Drink

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Published online ahead of print June 15, 2022 in *J Emerg Med*.

<https://doi.org/10.1016/j.jemermed.2022.06.016>

To the Editor,

We read with great interest the case report by Hughes and Schneir, “Paroxysmal Atrial Fibrillation Associated With the Trigger Sequence of Strenuous Exercise Followed By Cold Water Ingestion”, which describes a trigger sequence for atrial fibrillation that is not well documented in the literature.¹ The patient, a healthy 64-year-old man with no history of prior atrial fibrillation, experienced two isolated episodes of atrial fibrillation, both triggered by the specific sequence of strenuous exercise followed by ingestion of cold water. Both episodes of atrial fibrillation resolved with electrical cardioversion. His cardiac evaluation was unremarkable. Over the subsequent seven years, he avoided this particular trigger dyad and has not experienced a recurrence of atrial fibrillation—though he has continued to engage in strenuous exercise without cold drinks and to drink his cold beverages but not in a post-exertional state. As only the combination throws him into atrial fibrillation, only the combination needs to be avoided to maintain effective rhythm control.

The patient of Hughes and Schneir is not the only one to have developed paroxysmal atrial fibrillation from this combination trigger. We published in 2016 a case report of a young man with two isolated episodes of cold-drink-induced atrial fibrillation that began while gulping down an ice-cold slushie drink. Just prior to the drinks, he had been engaged in strenuous outdoor labor at work and had just begun his walk home.² He, too, required emergency care and underwent cardioversion. In response to that online case report, many patients afflicted with atrial fibrillation or flutter triggered by cold drink or cold food, what we have termed “Cold Drink Heart,” have emailed us to relate their own experiences. We described the first 16 cases in an essay published in 2020.³ We since have heard from more patients with this condition. Though they were not asked if the sequence described by Hughes and Schneir was among their triggers, 9 of 54 patients (17%) volunteered that at least some of their atrial fibrillation episodes were triggered by the exertion-plus-cold-drink combination. The nature of exertional activities varied, including intense gym workouts, aerobic sports (e.g., racquetball), and strenuous outdoor jobs (e.g., fighting fires or moving heavy pavers). Curious to better understand the prevalence of the sequence trigger, we have included this topic among the survey questions we are sending our emailing patients to learn more about their experience with Cold Drink Heart.

We commend Hughes and Schneir for bringing this case report to press. As their patient discovered, many physicians are unaware that the ingestion of cold drink or food can precipitate atrial fibrillation, whether coupled to a post-exertional state or not. This unfamiliarity leads some clinicians to dismiss the causative claims of their patients with Cold Drink Heart, as many of our emailing patients described.³ Several patients have printed out copies of relevant published reports or essays and brought these to their uninformed physicians to bring them up-to-date on the literature. This case report by Hughes and Schneir will serve to advance this educational agenda, as it teaches more physicians about this under-recognized cardiac condition. Physician education on avoidable triggers is critical, for how else can we help patients identify and avoid triggers with the goal of reducing their overall symptom burden?⁴ And if there is one thing we know about the serious medical complications that can develop from paroxysmal atrial fibrillation (e.g., permanent atrial fibrillation, heart failure, ischemic stroke), the less time spent in atrial fibrillation the better.

Hughes and Schneir will be heartened by the following note we received from one of our emailing patients, as it can relate to their case report as well as to ours: "I just hope that your research becomes common knowledge, so cardiologists and emergency doctors can ask questions about cold drinks and advise accordingly. Finding your paper changed my life, I would still be on medication and triggering atrial fibrillation with cold drinks if I had not. Can't say thank you enough!"

References

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