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**Headache during cryoballoon ablation for atrial fibrillation.**

[Pison L](http://www.ncbi.nlm.nih.gov/pubmed/?term=Pison%20L%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)1, [Peeters P](http://www.ncbi.nlm.nih.gov/pubmed/?term=Peeters%20P%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)2, [Blaauw Y](http://www.ncbi.nlm.nih.gov/pubmed/?term=Blaauw%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)3, [Vernooy K](http://www.ncbi.nlm.nih.gov/pubmed/?term=Vernooy%20K%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)3, [Kumar N](http://www.ncbi.nlm.nih.gov/pubmed/?term=Kumar%20N%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)3, [Philippens S](http://www.ncbi.nlm.nih.gov/pubmed/?term=Philippens%20S%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)3, [Crijns HJ](http://www.ncbi.nlm.nih.gov/pubmed/?term=Crijns%20HJ%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)3, [Vlaeyen J](http://www.ncbi.nlm.nih.gov/pubmed/?term=Vlaeyen%20J%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)2, [Schoenen J](http://www.ncbi.nlm.nih.gov/pubmed/?term=Schoenen%20J%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)4, [Timmermans C](http://www.ncbi.nlm.nih.gov/pubmed/?term=Timmermans%20C%5BAuthor%5D&cauthor=true&cauthor_uid=26023176)3.

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**Abstract**

**AIMS:**

Headache has been reported to occur during cryoballoon ablation for atrial fibrillation (AF). No study has systematically analysed this phenomenon.

**METHODS AND RESULTS:**

Twenty consecutive patients with symptomatic AF underwent cryoballoon ablation without sedation. Headache was evaluated before, during, and after the first cryoapplication in every pulmonary vein (PV) using a visual representation of a head for location of the headache, a numerical rating scale (NRS) for measuring pain intensity and the short-form McGill pain questionnaire (MPQ) for qualitative analysis of pain. The order in which the PVs were ablated was randomized. Sixteen (80%) patients perceived mainly frontal headache during cryoablation. The overall NRS scores were significantly higher during (5.1 ± 1.7), compared with before (2.7 ± 1.4), and after (3.5 ± 2.2) a cryoapplication (P < 0.05). The NRS score was significantly higher during ablation of the first PV. The intensity of the perceived headache was not related to the temperature reached 150 s after initiation of a cryoapplication (P = 0.81). Of the MPQ, three sensory adjectives and one affective adjective averaged between scores 1 and 2, representing mild-to-moderate severity of pain.

**CONCLUSION:**

The majority of patients treated by balloon cryoablation experienced headache during a cryoapplication. There was no correlation between the temperature reached during a cryoballoon freeze and the intensity of the headache. Cryoballoon ablation of the first PV was significantly more painful than the remaining PVs.

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