

Dr. Paulo Pêgo-Fernandes presents an unpublished study at the Congress of STS

RBCCV 44205-1163

Dr. Paulo Pêgo-Fernandes, professor of FMUSP (INCOR), Editor of the São Paulo Medical Journal, and member of the Editorial Board of the Brazilian Journal of Cardiovascular Surgery (BJCVS), was featured in an article in the Bulletin of the 46th Annual Meeting of the Society of Thoracic Surgeons (STS), held from 24 to 27 January in Fort Lauderdale, Florida, United States.

The article approaches the presentation of Phase I of a trial on "Therapeutic endoscopic thoracic sympathectomy" by Dr. Paulo Pêgo. 15 patients with dilated cardiomyopathy and an ejection fraction below 40% participated in the trial, all in functional class II or III according New York Heart Association, with heart rate above 65 beats per minute, despite the correct use of beta-blockers, or because of intolerance of the patient to the drug.

The procedure proved to be safe and no patients experienced adverse events related to the procedure in the perioperative period or during the initial 6 months of follow-up. According to Dr. Paulo Pêgo, the technique is easy to apply and shows to be safe in patients with severe heart failure, and could be an alternative to achieve sympathetic blockade in patients with severe dilated cardiomyopathy.

Early Data Bode Well For Thoracic Blockade

Several surgical procedures might provide palliative treatment for patients with dilated cardiomyopathies. Previous research has shown in such cases that the level of sympathetic nervous activity in patients with severe heart failure is a major determinant of prognosis.

"In an effort to exploit this observation, we conducted a proof-of-principle trial of therapeutic endoscopic thoracic sympathetic blockade in heart patients to assess safety and immediate ventricular function effects," said Paulo M. Pêgo-Fernandes, MD, who will present the results of his phase I clinical trial on Tuesday.

The study investigators enrolled 15 patients with dilated cardiomyopathy and left ejection fraction less than 40%, New York Heart Association functional class II or III, and heart rate above 65 beats per minute, despite adequate beta-blocker use or because of patient intolerance of the drug. Of those, 10 patients underwent left infrastellate ganglion plus T3-T4 interspinal space clipping through videothoracoscopy, while the other five were randomized to a control group.

The criterion for surgical reversal was severe worsening of heart failure symptoms in the perioperative period, according to Dr. Pêgo-Fernandes and his colleagues at the Faculdade de Medicina da Universidade de São Paulo, Brazil.

The procedure appeared to be safe; none of the treated patients experienced any procedure-related adverse cardiovascular event in the perioperative period or during the initial six months of follow-up.

Two patients died from unrelated causes at the initial follow-up. Only one patient failed to improve clinically (this patient maintained functional class III), whereas this parameter did not change in the control patients and two experienced heart failure leading to death, according to the researchers.

In addition, in the treated patients, a significant improvement of left ventricular ejection fraction was documented (from 21% to 28%, $P = .02$) at six months of follow-up, whereas this parameter did not change in the control patients.

"Endoscopic left thoracic sympathectomy is feasible and appears to be safe in severe heart failure patients. Exploratory data from this study suggest that this procedure might be an effective alternative approach to sympathetic blockade in the treatment of dilated cardiomyopathies," Dr. Pêgo-Fernandes concluded. ■



DR. PAULO M. PÊGO-FERNANDES

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