

Author's response to reviews

Title: Electrophysiological Evaluation of Phrenic Nerve Injury During Cardiac Surgery - Prospective, Controlled, Clinical Study-

Authors:

Dr Suat Canbaz (scanbaz2001@yahoo.com)
Nilda Turgut (nildaturgut@trakya.edu.tr)
Umit Halici (umithalici@trakya.edu.tr)
Kemal Balci (kbalci@trakya.edu.tr)
Turan Ege (turanege@ttnet.net.tr)
Enver Duran (enverd@superonline.com)

Version: 2 Date: 8 Oct 2003

Dear Sir,

I sent revised version of my article entitled "electrophysiologic evaluation of phrenic nerve injury during cardiac surgery"

I revised it with guidance to reviewers. I hope you will consider it for publication.

The article had been revised by BMC BioMed Central for linguistic point of view.

The revisions were underlined in the text.

Dr Suat Canbaz

Respond to the Reviewer 1 (Antonio Cruz-Martinez)

a) Discretionary Revision:

The paper extension was mildly reduced (especially material and method section).

b) Minor Compulsory Revision:

Table 4 was deleted from the article

c) Major Compulsory Revisions:

I) A significant decrease was observed between preoperative and postoperative amplitudes in the valve replacement group (statistically not significant). The mean value was relatively high due to peak measurement was taken from a patient in the valve replacement group. For this reason, standard deviation of preoperative amplitude measurements was calculated as low in this group compared to other groups. Because of amplitude measurements were showed a wide standard deviation in all groups, difference between pre- and post-operative values was not accepted statistically significant.

Discussion of this statistical contrary in the article was not considered as appropriate due to unsuitable understanding.

II) The below sentences were added to the Results and Discussion Sections:

"Conduction was still absent from the left phrenic nerve in the other four patients six months and twelve months later."

"We were supposed that the refractory nerve lesions in four patients were severe axonal damage and irreversible because of the lesions were not improved during one year."

"Because of the unilateral lesion and there was not dyspnea in these patients, surgical diaphragmatic plication was not considered."

III) The below sentences were added to the Results and Discussion Sections:

"Phrenic nerve latency and amplitude were normal limits in this patient."

"Nerve lesion in other one patient was mild axonal damage and it was recovered during short time."

Respond to the Reviewer 2 (Yuksel Atay)

3) We were used the flouroscopy for diagnosis of phrenic nerve injury, but our flourosopic results were not correlated to the electrophysiologic measurements.

While the flourosopic findings are positive in all patients with electrophysiologic nerve lesion, the nerve lesion was not showed electrophysiologically in some patients who flouroscopy positive.

Flourosopic evaluations were not included to the article because of the results were not adequately safe.

Related sentence was improved as below as;

"Moreover, we routinely followed up diaphragm elevation with x-ray investigation and fluoroscopy."

4) Diaphragma plication with open surgical and thoracoscopic techniques are preferred in patients with bilateral diaphragma paralysis and severe dyspnea. Due to not surgical indication, we were not performed diaphragma plication. But, if there are enough indication, we think that the surgical intervention is mandatory.

This situation was pointed in article as;

"Because of the unilateral lesion and there was not dyspnea in these patients, surgical diaphragmatic plication was not considered."

5) The comment and one year results of the patients with phrenic nerve lesion were pointed out in the article;

"Conduction was still absent from the left phrenic nerve in the other four patients six months and twelve months later."

"We were supposed that the refractory nerve lesions in four patients were severe axonal damage and irreversible because of the lesions were not improved during one year"