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Letters to the Editor

Letter to the Editor

Are the aortic anatomical normal leaflets, normal leaflets?☆

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Keywords: Aortic root; Cardiac surgery; Innervation; Cardiac valves

I read with interest a recent article by Thubrikar et al. [1] where they suggest that in dilated aortic roots the anatomically normal leaflets, however, were not geometrically normal. Thus they conclude that during valve-sparing surgery, it may be necessary in some cases to correct not only the dilatation of the aortic root but also the leaflet free-edge length in order to achieve a competent valve.

We studied the nervous fibers distributions with glycosaminolglycans' (GAG's) leaflet distribution in 15 aortic valve leaflets in aortic root dilated and judged anatomically normal and 15 leaflets in normal aortic valve (homograft). We found a significant decrease in the fibers innervation — acetylcholinesterase positive fibers — and also in GAG's total quantity and distribution [2,3].

The simple, anatomical, analysis of aortic leaflet before the surgery cannot be sufficient. As a matter of fact, this question is particularly relevant in case of plastic of aortic valve leaflets or valve-sparing procedures.

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☆The authors of the original paper [1] were invited to comment on this Letter to the Editor but declined the offer.

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Letter to the Editor

Can we consider thymectomy before pregnancy in female patients with myasthenia gravis?

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Keywords: Myasthenia gravis; Pregnancy; Prognosis; Transient neonatal myasthenia gravis; Thymectomy

I have read with interest the article by Roth et al. [1] reporting the course of a group of patients with myasthenia gravis (MG) during pregnancy. Roth et al. [1] analyzed retrospectively the outcome in eight patients with MG with a previous thymectomy and seven patients without thymectomy, reporting a better outcome during the pregnancy in thymectomized mothers and also in the babies. Recently our group reported the prognosis of 18 pregnant women with MG during the pregnancy [2]. The majority of the patients in our study had a thymectomy before the pregnancy (17 of 18 patients) and the prognosis was similar to the classical series of myasthenia gravis [3,4], 11% improved, 39% had worsening and 50% remained clinically unchanged. Our study contains patients with a previous thymectomy [2], and the trend demonstrated in the study by Roth et al. [1] at least in this group was not observed. This study was not considered in the analysis of this article [1].

Djelmis et al. [4] reviewed 69 pregnancies among 65 women. Twenty-five percent showed improvement, 45% did not change and 30% suffered exacerbations. Twenty-five patients (38.5%) had a previous thymectomy before the pregnancy. This study suggested that thymectomy before the pregnancy can minimize the likelihood of neonatal myasthenia. Batocchi et al. [3] evaluated the course of 47 females with MG who became pregnant. During pregnancy 41% had no change, 39% improved and 19% got worse. They concluded that the course during pregnancy is highly variable and unpredictable. Forty-two patients had thymectomy before the pregnancy. Both studies did not analyze the prognosis according to the thymectomy status.

The suggestion of Roth et al. [1] that thymectomy can improve the prognosis during the pregnancy is good but the evidence to support this idea is not solid. In our institution, we empirically recommend the thymectomy in the majority of the patients before the pregnancy. We do not have strong basis to support this recommendation but we have the same

idea as Roth et al. [1] that thymectomy before the pregnancy can improve the evolution of MG during the pregnancy. The most important limitation of the study of Roth et al. [1] is the sample size and due to the unpredictable course of myasthenia gravis during pregnancy the observation about a better prognosis in thymectomized mothers could be obtained only by chance. The second observation in this study about a better prognosis in babies of mothers with myasthenia gravis should be taken carefully. The prevalence of transient neonatal myasthenia gravis is highly variable in reports, going from 5 to 30% and mainly explained by the different methods to perform the diagnosis but potentially a genetic variation has been suggested [5]. In the study by Roth et al. [1], two newborns had symptoms after the delivery and both belonged to the nonthymectomized group of mothers. Again this observation could be derived only due to the small sample size of the study and not related directly with thymectomy status of the mother. Overall, this study has an interesting observation but more investigation is required.

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Reply to the Letter to the Editor

Reply to Tellez-Zenteno

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Keywords: Myasthenia gravis; Thymectomy; Pregnancy; Transient neonatal myasthenia gravis; Prognosis

We thank Dr Tellez-Zenteno for his interesting remarks. We appreciate his valuable study on 18 patients, which we unfortunately did not cite [1]. Of course, we know the limitations of our own study, but it seems that the Mexican group comes to the same conclusion, that thymectomy should be recommended before pregnancy and that radical thymectomy during pregnancy or in the early post-partum period should be avoided [2].

Despite the unpredictable course of myasthenia gravis (MG), most of the studies in the literature seem to demonstrate that the majority of patients have an unchanged (or improved) stage of MG during pregnancy [3] and that the radical thymectomy results independently in a more stable course of MG and long-term benefit (Table 3: literature overview, from our previous study) [4].

The fact that we did not observe a single case of a myasthenic newborn in the group of thymectomized mothers is not an isolated observation. Although other studies did not describe a statistically relevant difference in the rate of neonatal myasthenia between nonthymectomized or thymectomized mothers, Papatestas et al. [5] reported that the incidence of myasthenic newborns of women who had not undergone thymectomy was twice that of the thymectomy group. In addition, we cannot confirm the contraindication of breast-feeding by mothers with MG, which is often advocated empirically.

We hope that our paper has stimulated further research in this field.

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Letter to the Editor

Oxidative stress and one-lung ventilation

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Keywords: Lung—basic science; Anesthesia

I read with great interest the paper by Misthos et al. [1]. In this prospective, nonrandomized report, the authors examine the effects of the duration of one-lung ventilation (OLV)