

## Reply to letter to the editor concerning—“Congenital diaphragmatic hernia in neonates: factors related to failure of thoracoscopic repair”

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Dear Sir,

We are grateful to Mr. Inoue for discussing our paper and for opening up a debate on thoracoscopic repair of congenital diaphragmatic hernia (CDH), particularly on technical issues. The incidence of conversion is likely to be affected by the criteria of conversion, and conversion can be a risk of worsening pulmonary hypertension because of prolonged operative time. I agree with Mr. Inoue on these points. In our series [1], conversion was determined by consultant pediatric surgeons according to operative findings and cardiopulmonary status. Fortunately, post-operative course was uneventful in all cases.

As reported in Mr. Inoue’s letter, conversion might have been avoided in some of our cases using the endoscopic surgical spacer. We appreciate his suggestions of surgical technique using this device [2].

With regard to the thoracoscopic patch repair in CDH, we do not mean that the patch repair is a contraindication for thoracoscopic repair. We have not performed thoracoscopic patch repair, so far. A large defect size is considered to be related to the severity of CDH. Although patients who met our selection criteria for thoracoscopic repair were relatively mild case of CDH [3], some of them had a large defect and

were converted. Keijzer et al. [4] emphasized that a rather large patch to make the dome shape of diaphragm prevent recurrence, and Inoue et al. [5] recently reported successful patch repair without recurrence. We introduced thoracoscopic repair at our institute in 2007, but the number of cases was limited. Therefore, we decided to convert to open repair in cases with a relatively large defect. They could be a candidate for patch repair using techniques reported by Keijzer et al. [4] and Inoue et al. [5] with advances of our surgical skills.

Finally, we would appreciate Mr. Inoue’s suggestions about the progress of surgical techniques and efficient surgical devices for thoracoscopic CDH repair. We believe that our paper and his suggestions would be an encouragement to pediatric surgeons to perform thoracoscopic repair of CDH.

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