

뇌신경재활

게시일시 및 장소 : 10 월 18 일(금) 13:15-18:00 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 15:45-16:30 Room G(3F)

## **P 2-119**

### **Prognostic prediction of dysphasia using DTT of the CBT in the early stage of ICH**

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#### **Objectives**

We investigated the predictive value of the corticobulbar tract(CBT) for dysphasia using diffusion tensor tractography(DTT) in the early stage of intracerebral hemorrhage(ICH) for dysphasia.

#### **Methods**

Forty-two patients with spontaneous ICH±intraventricular hemorrhage(IVH) and twenty-two control subjects were recruited. The patients were classified into three groups: group A-could remove nasogastric tube(NGT) in the acute stage of ICH, group B-could remove NGT within six months after onset, and group C-could not remove NGT until six months after onset. The CBT were reconstructed, and fractional anisotropy(FA) and tract volume(TV) values were determined.

#### **Results**

The FA of the CBT in the affected hemisphere in group A was lower than in the control group( $p<0.05$ ). The FA and TV of the CBT in the affected hemisphere in group B were lower than those in the control group( $p<0.05$ ). In group C, the FA and TV in the affected hemisphere and the TV in the unaffected hemisphere were lower than in the control group( $p<0.05$ ). The TV of the CBT in the affected hemisphere in group B showed a moderate negative correlation with the length of time until nasogastric tube removal( $r=0.430$ ,  $p<0.05$ ).

#### **Conclusions**

We found that patients with CBT injuries in both hemispheres were not able to remove the NGT until six months after onset, whereas patients who were injured only in the affected hemisphere were able to remove NGT within six months of onset. The severity of injury to the CBT in the affected hemisphere appeared to be related to the length of time until NGT removal.

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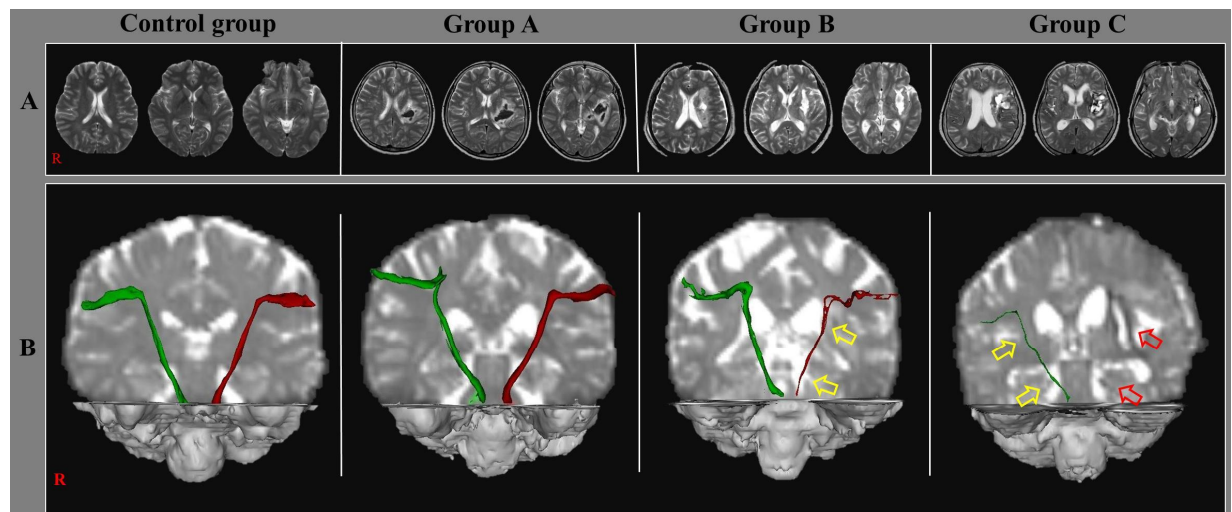


Figure1. T2-weighted brain magnetic resonance images (A) and results of diffusion tensor tractography for the corticobulbar tract (CBT)(B). Control group: a representative subject (42-year-old female), group A: a representative patient (62-year-old female), group B: a representative patient (64-year-old male) shows narrowing (yellow arrow) of the CBT in the affected (left) hemisphere, and group C: a representative patient (77-year-old female) shows narrowing (yellow arrow) of the CBT in the unaffected (right) hemisphere and non-reconstruction (red arrow) of the CBT in the affected (left) hemisphere.