Author’s response to reviews

Title: Anterior Cruciate Ligament Reconstruction in a Patient with Athetoid Cerebral Palsy: A Case Report

Authors:

Takuya Tajima (kingt2@hotmail.com)
Etsuo Chosa (chos@med.miyazaki-u.ac.jp)
Keitarou Yamamoto (keitarou@med.miyazaki-u.ac.jp)
Nami Yamaguchi (samzouz3@yahoo.co.jp)
Shinji Watanabe (shinjiw@med.miyazaki-u.ac.jp)
Katsuhiro Kawahara (kkatsu@med.miyazaki-u.ac.jp)

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Author’s response to reviews: see over
Dear Professor Kai-Ming Chan

Enclosed please find our paper entitled ‘Anterior cruciate ligament reconstruction in a patient with athetoid cerebral palsy: A case report’ which we submit for publication in Sports Medicine, Arthroscopy, Rehabilitation, Therapy & Technology.

This manuscript has not been published or submitted to your journal or other journals either in whole or in part. Furthermore we guarantee that the material will not be submitted for publication elsewhere until a decision has been made by you as to acceptability for publication.

We appreciate your comments and suggestions for the previous manuscript. Based on your comments and requests, we have made modifications in the manuscript. Native check is also performed.

We believe that this work will be of interest to your readers because this is the first report that shows anterior cruciate ligament reconstruction in a patient with athetoid cerebral palsy.

The poster presentation of present report was performed at 1st JOSKAS annual meeting (2009).

Your consideration of this paper is greatly appreciated.

Very sincerely yours,

Takuya Tajima MD, PhD
Comments to reviewer 1

The present manuscript was proofread by a native English speaker to improve the language and grammar. We mentioned the revised word or sentence was written by red or underline in the manuscript.

Answer to the Major criticism

1 & 2.
First, I am apologized that the course of present case was omitted in detail. The patient already had two times surgeries before ACLR at other hospitals. However, her knee instability was remained. Before the patient had knee injury in 1999, she enjoyed walking or cycling, although she had low physical activity. I agree that most of surgeons hesitate to perform ACLR in a patient with cerebral palsy. If she never had knee surgery or her symptom was only knee pain, we select the arthroscopic debridement or meniscectomy without ACLR. Unfortunately, her case was not, main symptom was knee instability. So we select ACLR to improve knee stability in this case. We added the some sentences and figures in the manuscript. (Lane: 65-71, Figure 1-A and B)

3.
I am sorry that my manuscript was very irregular and unskillful. I correct the manuscript. (Lane: 80-82)

4.
1) In 1999, the local physician did not make an accurate diagnosis. In 2001, other local physician pointed out the avulsion fracture of ACL tibial insertion in X-ray examination. (Lane: 63-64)

2) Under anesthesia, the ACL functional manual testing such as Lachman test and Pivot shift test showed positive. However, the examination using arthrometer such as Kneelax or KT-2000 was not performed (Lane: 83-85). The manual testing such as Lachman test and pivot shift test was also performed at the time of second look evaluation. However, the examination using arthrometer was not performed (Lane: 119-120).

3) In the involuntary movement associated with athetoid cerebral palsy, movement pattern and strength is variable rather than regular, and becomes more intense at times when the subject move. Maintaining a constant posture is difficult for the patient, and sudden movement of joints may occur. In the present case, her involuntary movement was increased when she was nervous, such as
attaching the instrument around her leg. It is impossible that any examination guarantee 100% of accuracy and reliability in this case. We looked for the available examination to evaluate knee instability. The patient underwent evaluation by stress radiography, because this technique can be repeated and it is useful as a simple, low-cost modality requiring no special measures.

5.  
1) Appropriate rehabilitation programs for such patients have not been defined. Generally, ACL works the range at 0-30 degree. The back knee (hyper extension) is the one of the risk factor for ACL re-rupture or stretch out of the graft was also reported. Therefore, we employed cast immobilization at 20 degree for 3 weeks.

2) To remove the creep phenomenon, the pre-tension was added to the graft, and ten times knee extension and flexion was performed before the fixation of the tibial side. The length change was minimal. However, to prevent knee hyperextension and stretch out of the graft due to involuntary movement, we employed the restriction of extension. Appropriate rehabilitation programs for such patients have not been defined.

Answer to the Minor criticism  
1. I added the sentence of MRI findings on the meniscus (Lane: 81-82).

2. I correct the word.

3. We employed the 2000 IKDC knee forms in the present case. The reference is added. [10]

4. Popliteal angle was 0° means no contraction of the hamstring. The word of popliteal angle and this evaluate concept was already reported. 

5. I added the sentence of the area and degree of articular cartilage degeneration (Lane: 88-89).

6. I correct the word tension to movement pattern and strength. (Lane: 129)

7. I reconfirmed and correct the numbering of the figures and legend.
In the involuntary movement associated with athetoid cerebral palsy, movement pattern and strength is variable rather than regular, and becomes more intense at times when the subject move. Maintaining a constant posture is difficult for the patient, and sudden movement of joints may occur. In the present case, her involuntary movement was increased when she was nervous, such as attaching the instrument around her leg. We looked for the available examination to evaluate knee instability. The patient underwent evaluation by stress radiography, because this technique can be repeated and it is useful as a simple, low-cost modality requiring no special measures.