Reviewer’s report

Title: Unexpected delayed recovery from longterm renal failure in a 12-year-old girl with severe diffuse proliferative lupus nephritis

Version: 2 Date: 4 March 2012

Reviewer: Yuji Kamijo

Reviewer’s report:

General Comment
In this case report, Ross et al reported a case of young patients with very severe lupus nephritis, which was introduced to complete remission via repeated active immunosuppressive therapy in spite of about 3 months hemodialysis needed situation. This case report would be valuable for clinical physician to learn a possibility that kidney function could recover fully in the situation that several months of oliguria continued. The authors claimed that this good clinical course is due to renal regenerative capacity of young patient, however I think this conclusion is not based on sufficient evidence. I also think the clinical information presented by authors might be insufficient.

Specific comments
1. There is a misspelling in Abstract. Authors should change “lupus erytematodes” to “lupus erythematodes”. I think “complete remission” would be adequate rather than “complete resolution”.

2. I would like to know whether the patient had other autoantibodies including ANCA, anti-GBM antibody, anti-phospholipid antibodies, and anti-extractable nuclear antigen. Did this patient have no other immune abnormalities?

3. I would like to know whether the patient had findings of hemolysis and abnormal coagulation via autoimmune mechanism.

4. I would like to know about the past history and family history.

5. The authors described that they decided the introduction of immunosuppressive therapy after diagnosis of severe proliferative lupus nephritis. However, Figure 3 indicates that the methylprednisolone pulses therapy was carried out immediately after admission. Did the authors carry out kidney biopsy to uncontrolled kidney failure patients? I think the making the preparation of kidney tissue is needed several days. The authors should indicate when they carried out kidney biopsy. If authors conducted active therapy from severe clinical situation before histological confirmation, they should describe this urgent situation appropriately.

6. For the judgment of withdrawal of immunosuppressive therapy or continuation of the therapy, the re-biopsy might be useful. The authors should discuss about
the indication of kidney re-biopsy.

7. The authors claimed that the reason of good recovery of kidney function is due to the regenerative capacity of kidney in young patients. However, there is no evidence demonstrating “regeneration” of kidney in this study. Especially in glomeruli, I think the main reason of recovery of kidney function might be due to the good attenuation of inflammation resulting in disappearance of inflammatory cell from glomerular capillary by repeated immunosuppressive therapy, not to regeneration of glomeruli. Authors should discuss about this possibility. If there is direct or indirect evidence concerning regeneration of glomeruli, they should present it.

8. I think the lack of chronic lesion such as glomerulosclerosis and marked interstitial fibrosis would be important for understanding this clinical course. The authors should discuss about the possibility that active inflammatory pathological feature without chronicity could recover fully. I think that her glomeruli would recover, not regenerate. In this meaning, I think the important matter would be lack of chronic lesion, not the “high regenerative capacity of the kidney in children and young adults”.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.