Reviewer's report

Title: Atypical X-linked Agammaglobulinemia caused by a Novel BTK Mutation in a selective IgM Deficiency Patient.

Version: 3 Date: 10 July 2013

Reviewer: GUHA KRISHNASWAMY

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Major revisions:

This is an interesting patient with presumed XLA and recurrent sinopulmonary infections who developed nephropathy.

1. The statement that low IgM requires evaluation for XLA and btk mutation is erroneous and a generalization that should not be suggested by a single case report. The near normal IgG levels may represent a leaky phenotype.

2. The use of IVIG infusion for sIgM deficiency as suggested by this manuscript should not be a recommendation as it is impossible to reconstitute IgM deficiency with IVIG for obvious reasons. This needs to be clarified.

3. I wonder why a sinus CT was not done or results discussed.

4. What was the reason for the very elevated IgE in the brother?

5. A good evaluation of antibody responses to pneumococcal and/or DT immunization is required to confirm functional defect- this has not been provided.

6. Could the low B cells result from immunosuppressive therapy?

7. What is the 24 hour urine analysis result on this patient? Could the nephropathy have been a post-infectious complication (such as seen with PSGN).

8. Dosage of IVIG used for vasculitis and autoimmunity are different from dosages used as replacement therapy for PID- there is some confusion regarding this.

9. English language needs to be reviewed throughout the manuscript.

Level of interest: An article of importance in its field.

Quality of written English: Needs some language corrections before being published.

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.